

✝ Church Audio ✝

Getting the Sound Team and the Musicians to work together



If we look at the five ministries in Ephesians 4:11 (Apostles, Prophets, Evangelists, Shepherds, Teachers) we note that music and sound are not listed. This should always be foremost in the heads of Christian Musicians, Singers and Sound Technicians. Our jobs are to do all we can to ensure the five Ministries can be as effective as possible. Col 3:23-24; *“Whatever you do, work heartily, as for the Lord and not for men, knowing that from the Lord you will receive the inheritance as your reward. You are serving the Lord Christ.”* The sound team are there to ensure everyone can hear everything comfortably and clearly. The musicians and singers are there to offer atmosphere to whoever is currently ministering, and support the worship leader in bringing the bride of Christ into the presence of God. The Musicians, Singers and Sound Team are all servants, serving each other to ensure each member can offer a good service. The moment the music team and the musicians are at odds, their effectiveness will be reduced, and the Bride of Christ will suffer the consequences.

How will they receive if they can't hear the words? How can they float up to the throne of God if the music is a confused unpleasant racket?

Christian musicians, singers and sound technicians must always be sensitive to the continually changing ‘dynamics’ of a Christian Meeting

i) The first songs will typically be **Praise**. The musicians are too fresh, and the first song is never a great mix. You won't be able to hear all the words all the time in this period, but it isn't so crucial, everyone is just enjoying themselves, disconnecting from the outside world. After a song or two, the musicians and the congregation will mellow and the sound (and the air temperature) in the room will smooth out, and the sound team will be able to mix things nicely.

ii) **Worship**- After Christians have praised a while they will naturally become more worshipful. Now the musicians need to play differently e.g. less aggressive, more sensitive. The voices get more accent in the mix, as the instruments start playing more 'background' style. It is important that the words of the leader/exhorter get through particularly clearly from this point onwards.

iii) **Post-Worship**. There may be mixed periods of calm, reverence, and moving in the Holy Spirit. Whoever is speaking/leading must be easy to hear, not just their words but their *tone of voice*, as this is the component in the voice that touches people's hearts. Slightly lower any musician who isn't being sensitive e.g. playing too loud or playing an inappropriate style that invades the intimacy of people ministering.

iv) **Collection of Tithes & Offerings**. Music (if any) will be less demanding here.

v) **Sermon- Address- Message**. The words must be absolutely clear, easy to hear the tone of voice (the intimacy in the words). If a musician is asked to play in the background be sure that they are down low. Even low in volume they will still be audible, and we only want a 'veil' of sound (this is not a sing-along).

vi) **Sensitive ministering by leader(s)**. All the words, and the tone of voice, must always come through. Musicians and Singers who have not learned how to perform in a Christian environment, and are invading the Word, must have their volumes lowered.

During a Message/Sermon or when Leaders are ministering, background musicians shouldn't be playing a “known tune” as the congregation become distracted and subconsciously sing along to the tune (the musicians are stealing the attention away from the person ministering, and from the Word).

Every moment in the Spirit is a new moment. Musicians, Singers and Sound technicians must always show their ability to morph.

vii) **Communion/Lord's Supper**. Music will have a new balance to consider.

There will be days when the band is great, and the mix is great, yet few people seem to be worshiping and praising God. There will be days when everything was appalling, and you finish the meeting feeling ashamed, then one of the congregation comes up to you and says how great it was today.

We never know exactly what is happening in the spiritual realm, we just do our best, because He is worthy of our best.

Whenever any artists (musicians, singers, sound technicians) work together it's a recipe for disaster. Unless everybody in the sound and music team remains calm and respectful, and remembers who they're working for, there will always be trouble.

THE MUSICIANS MUST DELIVER THEIR BEST SOUND POSSIBLE TO THE SOUND TECHNICIANS:

Musicians must produce a properly tuned clean sound, of steady volume. A smart musician will make sure they deliver a quality steady sound that needs little messing with, so the sound technician will set their fader level and not have to worry about continually correcting the sound or volume on that channel. Musicians, listen carefully... *dynamics are created by sound, not by volume*. If you record someone who is shouting and play it back at low level, everyone still knows that the person is shouting by the stressed sound in the voice. Create your dynamics using sound... playing louder just causes trouble in the sound system.

Remember, the sound team are not professionals. Do all you can for the sound team (even buy them a nice manual) to help them make you sound good. No matter how great the music, if the singer sounds bad, the whole band is bad. Do all you can to see that singers have what they need, or you're toast!

An “**Arrangement**” for a song means the musicians have ‘arranged’ among themselves what each is going to do during the course of the song. Each song will be quite unique, and for each successive song the accompaniment style changes. Don't just say 1,2,3,4 and then everyone plays every song full-on from beginning to end, the Bride of Christ is worth more than that. Arrange songs so they build up as they proceed, and don't have everyone playing full strength all the time. The sound will improve exponentially on a song that is musically arranged.

Sound Check: Once the musicians have arrived (and settled down a bit) you need to have an “individual” sound check. One-by-One each musician needs to play (*they ‘must’ perform at a level and intention similar to how they will perform live*) while the other musicians stay absolutely quiet... no twinkling. It will happen a lot faster if the others don't disturb. Ensure you are getting a natural sound, with a good electrical level, from each musician. Now as you start rehearsing, the sound technician can sort out the levels in the Floor Monitors. Remember... any time musicians want any changes made to their floor monitors they ‘must’ perform at a level and intention similar to how they will perform Live while things are adjusted, or it's a waste of time.

Proper microphone technique:

Never put the microphone horizontal and in-line with your mouth as this is the cause of the terrible ‘**P**’ explosion (wind blast from your mouth) whenever you use words with “P”, and aesthetically the congregation can't see half of your face (not nice). The grill of the microphone should be just below chin-level, a hand-span away from the mouth, pointing up at the mouth. This avoids wind blasts, and collects the correct balance of sound coming from your mouth and nose. If the microphone is on a stand then learn to move side to side turning your head as you move so that your mouth is always seen by the microphone grill, and remember, the microphone only hears on the end, not all around the sides of the wire-grill.

If you are using a hand-held microphone, then lock your arm so that the microphone follows your mouth wherever you turn.

Never cup your hand up under the rear half of the wire-grill of a microphone as this causes the microphone to become omni-directional and causes squealing. Control your vocal dynamics so that the volume that reaches the mixer is as constant as possible. Do this by coming closer when you sing or speak quietly and pull away when you shout. Speak into a microphone to see if it is working, never BANG it, that will damage it (every bang means a little more muffled)!

Microphones reduce intelligibility! You need to over-compensate when you speak (it won't sound exaggerated to them). Listen to a recording where you spoke *clearly and concisely*, better? When you hear words *clearly and concisely* they go easily to the heart, muffled and mumbled words don't go easily to the heart.

Speak into your microphone listening for freshness (say ‘eSSSS’). You should be able to hear some ‘S’ but not too much.

Speak into your microphone listening for basses (say ‘PoPPy’). Is the microphone going to boom when you say ‘P’?

If you share a microphone with someone who comes on after you, and the microphone has a switch, don't switch the mic off (the person at the mixer will do that). This saves an ugly moment when the next person who uses the microphone starts without realizing it is switched off.

THE SOUND TECHNICIANS MUST DO ALL THEY CAN SO THAT EVERYBODY HEARS EVERYTHING CLEARLY:

Sound Technician... the Music Team perform to your sound system. You must capture and reproduce that performance faithfully and clearly to the congregation. The Ministry Team preach to your microphones. Make sure your sound system repeats the Word faithfully and clearly to the congregation. Whether the congregation receive healing, a word from the Spirit, and perhaps even salvation, has a lot to do with the clarity and volume of the sound. *How can they believe and receive if they never heard (on account of the muffled sound).*

Your job is to:

- gather all the instruments and voices on to separate input channels on the mixer.
- adjust individual volumes so that everyone can be heard.
- adjust any sounds (equalise them) only if and where they are unbalanced.
- lightly compress any sounds that are too dynamic.
- add a little Reverb or Delay to give ambient to particular singers or soloists, if applicable.
- send the result out to the main loudspeakers (FOH), and to the musician's floor monitors, as required.
- provide sufficient loudspeakers, with sufficient wattage, so that *everyone* can hear everything clearly... at an acceptable volume.

Things are considered 'mixed correctly' when you can hear all-the-words, and all-the-music, all-of-the-time. That's not easy, I know! It is an Art! You learn it!

It's not always about louder, it can be about pulling something back so something else comes through.

Do all you possibly can to help with the musician's thorn-in-their side, the floor monitors.

During the performance some distraught musician may start pointing at the floor monitor and giving a whole lot of weird signs and strange lip movements.

What is the difference between a musician and a chimpanzee? It's scientifically proven that chimpanzees are able to communicate with humans!

Answer: The sound team must discuss with the musicians on how to signal you when they want to change something in the floor monitor. An example:

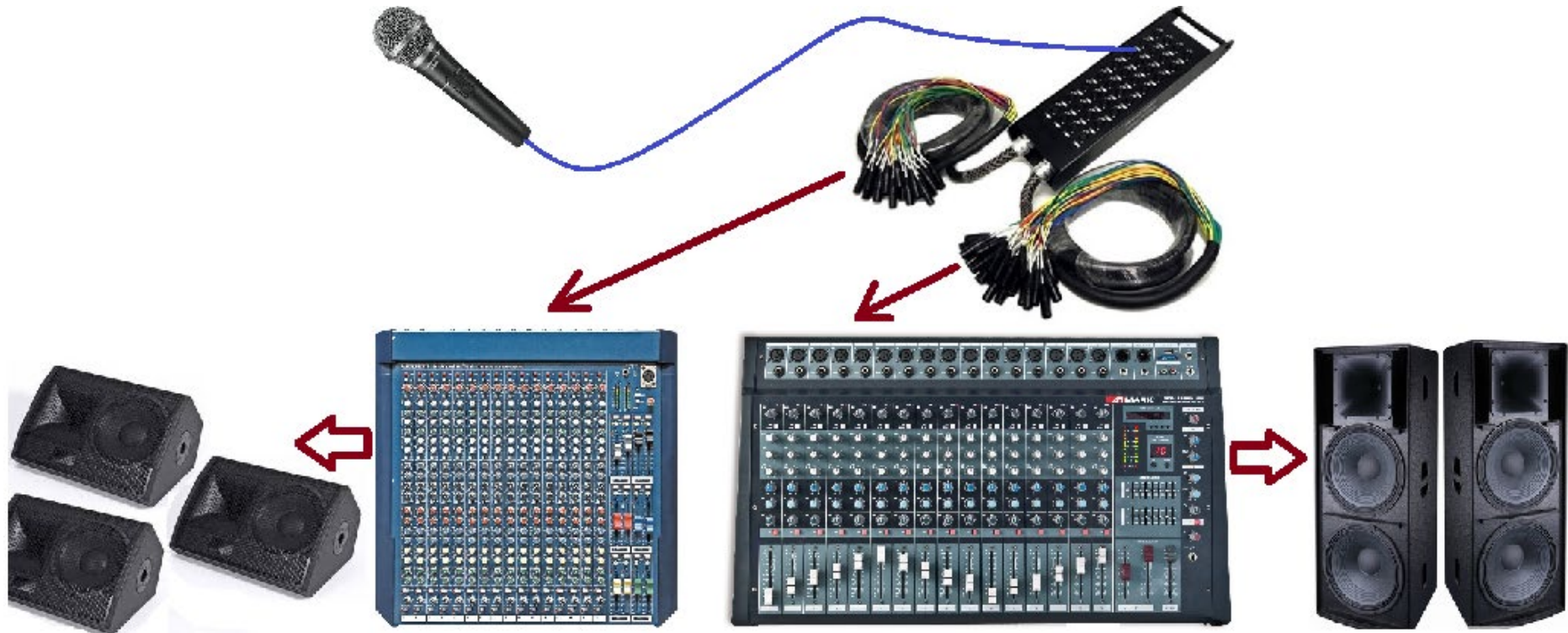
To change a level... 1. point at musician or singer. 2. Point to floor monitor concerned. 3. Point up or down (louder, softer).

To change a floor monitor general volume... 1. Point to floor monitor concerned. 2. Point up or down (louder, softer).

The Sound Technician who will be rostered on for a meeting must **attend** the appropriate rehearsal, and must **listen** to what the musicians are saying, and intending to do. The Worship Leader must tell the Sound Technician what is planned, and any particulars in the musical arrangements that may require attention. A Sound Technician should be doing everything in their power to ensure that the technology doesn't limit the ability of the musicians to flow freely.

Line Check: Before the Musicians arrive please connect all audio devices (Stage-Box, Loudspeakers, Floor Monitors, Microphones, Keyboard, DI, Laptop). A good sound technician will play music through the loudspeakers and floor monitors to confirm that the signal flow is good. Then raise the microphone faders slightly and simply say "testing" through each microphone, checking that they are going. Walk around with radio microphones checking for radio dead-spots. Musicians should not have to wait while you muck around trying to sort out basic things like signal flow... it is **your** responsibility to do the Line check first.

THINGS THAT CAN MAKE LIFE EASIER FOR EVERYONE:



When you have many floor monitors, and musicians/singers who are particularly fussy about what they want in their monitors, then you may need a separate person with a separate mixer dedicated to mixing the floor monitors (**Side-mixing**). To achieve this, we use a Stage box that has two multicore cables (snakes) instead of one. This is often called a **Split-Box**.

You connect the musicians into the Stage Box in the usual manner, and then connect one multi-core to the mixer for the Front-of-House mix and connect one multi-core to the mixer for the Floor monitor mix. Musicians love side-mixing because they have the technician just off to the side ready to make any little adjustments they might require, and the person mixing the FOH always appreciates not having to concentrate on the Floor monitor mix as well.

SIDE FILL:

On wide spread-out Stages it is hard for the musicians and singers to hear the full sound. We can help this immensely by adding **Side-Fill** Loudspeakers. The technical term is **Cross-Stage** Monitors. They are usually on speaker stands at head level, aimed “across” the stage.

The main purpose of these side loudspeakers is so that you can hear people on the other side of the stage.

As it will increase offstage noise, and greatly increase the chance of squealing everything, we make a special ‘cross-stage’ mix.

Everything right of centre is mixed into the left side-fill, and everything left of centre is sent to the right side-fill. Lead vocals are mixed into both sides. It results in a tighter sound field on the stage, similar to when musicians play on a narrower stage and they can hear each other.

Don’t put unnecessary things in the side-fills (if everyone can hear the drummer, or the electric guitar, then it shouldn’t be in the side-fills).

Side-Filling gives a fuller on-stage sound and is great for artists who move about. They are of particular value to lead singers with radio microphones who move about constantly, but all musicians say they hear everything much better (and they complain about their floor monitors less!!!).

FINALLY, REMEMBER!!

Musicians and Singers... don’t accuse the Sound Team of messing with the sound or levels after the sound check.

The sound always changes once the congregation arrives:

- *people absorb certain frequencies, changing the sound and the levels.*
- *people change the air temperature and humidity, changing the sound and the levels.*
- *musicians play louder, and differently, in front of a congregation, changing the sound and the levels.*

... **so**, don’t invest all your energy in getting ‘absolute perfection’ during a sound check. That is a waste of valuable time. It is better to concentrate on getting a clean sound, everyone on the same page, everything labelled.

The congregation don’t care how digital the Sound System is, or that the electric bass is a Stingray, they just want an inspiring sound that lifts them to the Throne of God, and that only comes from Team-work!

*Always remember... Love Hz
The Feedback Squeal? ... no Gain, no Pain*

*No, I don't have any gaffer tape
Yes. I know what all the knobs do*

*No, there's no ringing, you must have tinnitus.
Light travels faster than sound, which is why many people will appear bright until they start speaking.*

*No, I can't make the band sound better than they are
Can I get more talent on stage please?*

Mixing sound live doesn't require a rocket scientist, in fact, it's probably closer to plumbing.

It's easier to please 5,000 people, than 5 musicians.

What's the difference between a bad sound technician and a trampoline?? You take your shoe's off before you jump on a trampoline!

*Never look at the guitarist; it only encourages him.
Two singers walk into a bar... you'd think the second one would have seen it.*

*Did you hear about the bass player that was so bad even the drummer noticed?
Have you heard the one about the backing singer who sung in tune?neither have I.*

One day during band practice, the guitarist suddenly jumped on the drummer and started beating him. When the song leader finally got them broken up, she asked, "What on earth is going on?" The guitarist demanded, "He de-tuned one of my strings -- and he won't tell me which one!"

CREDITS

This material is offered freely to the Christian Churches; downloadable at Pietango.com

Text: *Original, by the Author, a Christian Recording Engineer.*

Images: *Designed by the Author. Some photographs were sourced from the Internet, then re-worked.*

Ever since the creation of the world, God's invisible attributes and divine nature have been evident. They are clearly understood through his workmanship, and all the wonderful things that he has made. Therefore, those who fail to believe and trust in him are without excuse, or defence. **Romans 1:20**

All of us have sinned and fallen short of God's glory, but God treats us much better than we deserve.

Because of Christ Jesus, he freely accepts us and sets us free from our sins. God sent Christ to be our sacrifice. Christ offered his life's blood, so that by faith in him we could come to God. **Romans 3:23**

If you declare with your mouth, "Jesus is lord," and believe in your heart that God raised him from the dead, you will be saved. For it is with your heart that you believe and are justified, and it is with your mouth that you profess your faith and are saved. **Romans 10:9**

For the Scripture (*Isaiah 28:16*) says, "Whoever believes in Him will not be disappointed." **Romans 10:11**

These things have been written so that you may believe that Jesus is the Christ, the son of God; and that by believing, and relying on him, you may have new life in his name. **John 20:31**