



**Live Sound (or Sound Reinforcement)** is the art of combining and processing numerous audio signals together to create a "mix" which is then amplified and distributed to the audience and performers. The primary goal is to cover the audience area, and stage, with an appropriately amplified signal.

## The job of mixing 'Live sound' principally involves:

- 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) that are unbalanced.
- lightly compress any sounds that are too dynamic.
- add a little Reverb or Delay to give ambient to particular singers or soloists.
- send the result out to the main loudspeakers (FOH), and the musician's floor monitors, as required.
- provide sufficient loudspeakers, with sufficient wattage, to create sound reinforcement so that everyone can hear everything at an acceptable volume.



Any Live Sound Technician that has to mix music needs to have at least a basic musical understanding in order to make the proper choices.

The "Line-up" for a song means which of the musicians and singers will be participating in this particular song. The two instruments that can play *chords* (multiple notes) are the Keyboard and the Guitar. One of these will typically be the '*backbone' accompanying instrument* for a song, and we would call that the main Rhythm Keyboard or Rhythm Guitar. There may be other keyboards and/or guitars playing chords as well, but only one should be the 'leader'. Make sure you accent this lead chordal instrument in your mix and keep any others slightly lower (especially if it is a guitar that is just "strumming along" or a keyboard playing "long sounds or just bashing out notes" as they will dirty the lead accompaniment). Use these additional harmony players to create a nice harmonic wall below the leader's volume.

Even though there may be multiple singers, there will generally be one who is leading with the melody line, and the others will harmonise and fatten the vocal sound. Once again, accent the principal singer and keep the other singers just underneath creating a nice harmonic wall to support the lead.

The line-up will usually contain a *rhythm section* as well. This will incorporate the Drums, Bass Guitar, and perhaps Hand-Percussion. These will work together to provide a steady beat (pulse) for the song. This section provides the "heart-beat" and is what makes the listeners want to move. There may be a *melodic section* that will play musical ornaments and do solo work. Typically, they are Lead Guitar, Synthesizer, Saxophone, Violin or Trumpet. Unless it is an "instrumental" (no singers) there will be a *vocal section* made up of Lead Vocalist, Harmony Vocalists (*Backing Vocals*), and possibly a Choir.

As always, when dealing with a line-up, don't try and keep them all at the same volume or you will just flood it, and everything will sound confused. Accent the leaders and bring the others up just underneath to make a supportive wall of sound. It isn't difficult to accent some instruments/singers while still keeping the others audible, it's just a matter of a little nudge up or down with the faders.

The "Arrangement" for a song means the performers 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 they may change their roles, and accompaniment styles. You really should know how they have planned to perform each of their songs. For this reason, Sound Technicians must attend music practices and must pay attention to what the musicians decide for each of their songs. Ask them to take a moment to explain what they want from each song, which voices and which instruments are leading. That way you know how to mix them.

When each new song comes along, you need to know the new line-up/arrangement. Who is the lead chord player? Who is the lead singer? Are there soloists?

When mixing live Front-of-House speakers we normally keep all the Pans in the Centre (not Left or Right) so the same mix is in all speakers (mono).

**Sub Grouping (or Stem-mixing)** is the method of mixing audio into smaller groups prior to combining them into the final master mix. Stems are also sometimes referred to as sub-mixes or sub-groups.

*An example*: All the Backing Singers are sent to Sub-Group # 1 (instead of LR). Musical instruments are all be sent to Sub-Group #2. Drums all to Sub-Group #3. All Sub-Group faders are assigned to L-R.

This way we can control their overall volumes, and even mute them when they're not performing, with just a couple of Sub-Group faders. Lead Singer, Announcer and Soloists all go directly to LR as they are always need more direct adjustments.

Obviously, how you group them will depend entirely on requirements of the performance.

Subgrouping your mix into controllable chunks is a definite advantage in a **church service** where you sometimes need to lower the entire music section momentarily to hear someone bring a word, and then raise the music again. This control of the various sections by simply sliding a few subgroup faders guarantees that you can stop the Music overpowering the Word.

How will they receive if they can't hear the Word?

How will they believe if they can't hear the Word?

How will they be healed if they can't hear the Word?

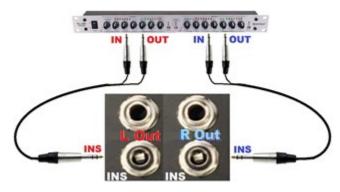
How will they be saved if they can't hear the Word?

You need to be able to lower the music section (as much as it takes) whenever it is too loud to hear the words properly.

If your mixer offers you **Mute Groups**, consider them too. Putting all musicians under a single master mute button makes it easy to silence them during the time they are not working. It just replaces the need to switch them on and off one by one. This stops unnecessary background noise.

If your mixer has a third **Mono Output** fader as well as the **L R** Output faders, but you don't use it, you may like to connect it to a separate loudspeaker in another part of the Auditorium, or in the Foyer, or for Side-Fill Speakers or for Bass Bins (Subs).

If you have a really fancy mixer you may have a **Matrix (Matrice)** which allows sub-grouping of different combinations of outputs, should you have quite specific needs.



# **Inserting Effect Units (Outboard Effect Units)**

**Compressors** are a sound technician's best friend, but always use them lightly. Glance from time to time at the GR Meter (Gain Reduction) to ensure you are not squishing too much. Compressors are normally "inserted" on the Input Channel of the Lead singer, and perhaps the microphone that handles the main announcements and preaching. This ensures all the words can be heard all the time. Some technicians insert a **Stereo Compressor**, or **Stereo Feedback** (squeal) **Eliminator** or a **Stereo Equaliser** at the LR Outputs.

The optimum, of course, is to insert a Stereo "**Drive Rack**" at the LR Outputs which will give you a professionally controlled output: Compression to ensure everything is heard, Peak limiting to protect the Amp and speakers, Equaliser and Spectrum Analyser to compensate for the Auditorium, Feedback Eliminator to stop the squeals... just missing the large fries!

# **Live Soloing**

By using the Headphones and pressing the soloing buttons (typically **PFL**) we can hear what people are doing on each individual channel. You are able to have more than one solo pressed, so you can listen to several together if you desire. Sometimes, when a whole music band is pounding away, there will be so much sound coming from the stage that it will be hard to hear in the Headphones. *Use Headphones that have a large diaphragm so that you can hear frequency content properly (small diaphragm headphones have poor frequency response) because you make decisions with the Equalisers based on what you hear. Headphones that are "noise-cancelling" are best suited.* 

**PFL** (pre-fader) solo's will let you hear the channel even if the fader is down.

**AFL** (after-fader) solo's won't be heard if the channel fader is down.

Exclusive solo's will switch off any previous solos.

In-Place solo's let you hear any panning and any reverbs or effects that the channel might be using.

Digital Mixers have **Solo-follows-Select**(button) and **Select-follows-Solo**(button) so that the screen and mixer face line up with Channel you want to work with. **CLEAR** will turn off all solos you have currently pressed.

## Priorities when the meeting starts

**First Priority= Levels:** As the meeting begins, the first priority is balancing everyone's levels. Look at each performer. Can you hear them? If you're not sure then solo them in the headphones and check what they are doing, or gently raise their fader until you can hear them. Continually watch individual levels, but don't lose sight of the big picture. The overall (general) level in the main loudspeakers can sneak up while you're concentrating on pushing up single levels. The Lead singer should be slightly louder than the rest of the singers. Harmony singers are meant to be the musical clothing, the vocal 'body' that supports the lead voice, and they mustn't drown out nor confuse the lead singers' words.

There will normally be one lead accompanying (chordal) instrument. This is usually the Piano (or Keyboard) or Guitar. Bring the level of this main accompanying instrument up just below the voices. This is the backbone of your mix.

Always ensure the lead singer is slightly louder than the music to a point where the words are intelligible.

If you have drums then you would now bring their levels up just under the main accompanying instrument, unless they are loud already, without microphones. Consider a 1 metre wall around the drum-kit and some absorbent panels (colourful) behind the drummer to contain the sound, if the drummer doesn't have the maturity or ability to play quietly like professionals can.

Now bring all of the other instruments up so that they are just under the voices and backbone chord instrument, acting as "sound support" for them. If there is a 'solo' instrument (sax, guitar, flute, trumpet etc.) at any point then raise it slightly for their solo. If there is no singing, then the solo instrument is now the singer. If someone is singing keep the solo instrument just below.

Use the Channel Faders for small fine movements, and the Channel Gains for big (coarse) movements (so that the Fader remains around the Zero [Unity] mark). Your goal is to hear ... *all-the-words, all-the-time* ... not as easy as it might seem.

# **Second Priority= Sounds:** We equalise (filter) sounds for two reasons:

- 1) make an unpleasant sound more acceptable to the ear.
- 2) make something more audible, often by adding a "little" high frequency freshness and lowering mid frequencies.

We DON'T filter if there's no reason.

Third Priority= Effects: You need the levels and sounds sorted before you can set your Effect Units properly.

**Compressors** –periodically glance at the Gain Reduction (GR) Meter to see how much you are currently compressing, and glance at the Threshold Meter to see that your signal is only going over your threshold level in loud moments (and not continuously).

Reverb –keep the Delay time as short as you can and send a high amount of Aux send from your mixer. This will give a full but clean ambience sound. Be very careful about considering big hall or cathedral reverbs when working live. These are more suited to Recording Studio work, and they will easily flood and confuse a live mix, especially if you are in a church building that is quite reverberated by nature. A little reverb helps singers immensely. Microphones dry out the voice and a slight artificial reverb restores the naturalness and adds a nice ambience. Sometimes a bad sound that you can't manage to improve with an Equaliser will suddenly sound ok with the addition of a little reverb.

**Echo** (**Delay**) -particularly if you have a very reverberant church, a short **Echo** (**Delay**) with a slight feedback will give a nice clean ambience for your singers etc., so you don't add any more reverberation to the already reverberated room.

Each time you add a channel to the mix the overall balance and sound will change. Some frequencies will add, some frequencies will subtract. It is a juggling act. Because, obviously, everyone performing needs to be heard; sometimes it is helpful to look directly at each one, can you actually hear them? Focus on giving them a 'natural sound' just like they sound if you are up close to them. Once you get experience you can be more creative with the Filters.

While you are balancing the channel volumes, keep an eye on the overall electrical level. Watch the Left/Right output Level Meters, they should be operating at a healthy level. For electronic reasons the Mixer circuits function optimally when the electrical levels inside it reach at least a half to two thirds of the output Level Meters. Watch all Peak Lights for any hint of overload. A Peak level that occasionally splashes into the red is Ok but if the Peak Lights continually flash then you will get distortion.

Continually listen for unwanted noises, hums, buzzes. When you hear disturbance... isolate one channel at a time to find the offender. Unplug one at a time, if necessary, until the noise goes away. Has a musician just turned something off or on, causing the disturbance? We find all noises by the process of elimination, there is no other way.

Make all audio adjustments "discretely" so that the public don't hear you working. For someone sitting in the audience it isn't pleasant hearing volumes leap up or down or sounds suddenly changing colour.

# Follow the 'dynamics' of program! You can't "set-and-leave" mixer settings in a Christian service.

You need to recognise each situation as it happens.

- i) The first songs will often be Praise. There will be a lot of racket in the first couple of songs and you'll never really get a great mix. The muso's are too fresh. 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. After a couple of songs, the musicians will mellow and start to play more smoothly, now you will be able to mix them nicely.
- ii) Worship- After Christians have praised a while they will become more worshipful. Here the musicians will start to play differently, and you will need to reconsider the balances of the instruments and voices. It is important that the words of the leader/ exhorter get through particularly clearly from this point onwards (slightly lower any instruments if they are invading the words too much, which is where sub-groups become so convenient).
- iii) Post-Worship Atmosphere. There may be periods of calm, reverence, waiting 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 a spiritual time. Slightly lower any musician who isn't being sensitive (playing too loud or playing an inappropriate style for the moment).
- iv) Collection of Tithes & Offerings may follow. There may be music with a new balance to consider.
- v) Sermon- Address- Message. The words must be clear and easy to hear. If a musician is playing in the background to create a pleasant atmosphere be sure that they are down low. Even low in volume they will still be audible, and we only want a veil of sound. The words must be clear enough to hear the tone of voice (the intimacy in the words). Press Record if you need to record the message.
- vi) Sensitive ministering by leader(s). All their words and tone of voice must come through.
- vii) Communion/Lord's Supper. There may be music with a new balance to consider.
- viii) Every moment in the Spirit is a new moment.

# Things that will hinder you getting a good result:

- Bad arrangement...
  - Keyboard doing long sounds, flooding the arrangement with sound (lower them)
  - Guitar simply strumming along, flooding the arrangement with sound (lower them)
  - Piano playing along with hundreds of notes, flooding the arrangement with sound (lower them)
- Musical Instruments poorly tuned. Bad pickups. Incorrect microphone placement.
- Excessive offstage volume spilling into everything.
- Bad Equipment. Loudspeakers (especially the small ones in the cabinets) blown and you don't realise it.
- Loudspeakers not placed correctly (where everyone can see them, and Tweeters are aimed at them).

# **Equalising when Mixing**

**Equalisation** (EQ) involves making the bass, mid and high frequency areas sound 'equal' to the ear. A 'balanced' sound has warmth coming from the basses, body coming from the mids, and freshness coming from the highs. We do this with Equalisers (Filters).

All instruments and voices have a note range. We divide their range into three parts and assess the sound for its warmth, body and freshness. Use your ears!

Boomy, Muddy sound = Excess Basses. Thin, weak sound = Lack of Basses.

Nasal sound = Excess Mids. Hollow sound = Lack of Mids.

**Cutting**, **Piercing** sound = Excess Highs. **Absent**, **Muffled** sound = Lack of Highs.

Your target is to make things sound pleasant to the ear, with none of the above characteristics, and "natural-sounding" as if you were standing in front of it.

Press the HPF (High Pass Filter) buttons on any Mixer channels that use microphones. This cleans the subsonic boom that microphones pick up.

Only filter what you have to. If it's not broken, don't fix it! A sound that is over-filtered will never sound 'natural' again.

Cut, rather than Boost, when filtering. Boosting causes spikes that quickly make a sound unnatural, and it's harder to control the volume of a spikey sound. Don't exaggerate when cutting or boosting. If you have to turn a cut/boost knob around too far to get any response... worry. It is the wrong microphone for the person, or it is in the wrong place. Always try and fix it at the source, equalising should be the last resort, not the norm. EQ can't fix a bad sound.

When sound-making you **must** have a personal opinion, because you have to make decisions. You are actually much better than you might think. Everyone knows a bad sound when they hear it... boomy, muddy, thin, weak, nasal, hollow, piercing, muffled is NOT an opinion... even a child knows it. If you want to improve your ear, start listening to quality recordings (CD's) intently. Listen to the high/mid/bass balance of sounds you like. Then you'll start making better sounds in your own right.

Be sure your Equaliser cut/boost dials (flat EQs) are all set to zero to start with. Sometimes they are left in a filtering position from the last time the Mixer was used.

#### How loud is too loud?

The United Kingdom Code of Practice Guide puts it nicely "If two people have to shout, or have difficulty communicating, when standing 2m apart then a noise assessment should be made".

If you have a Sound Level Meter you can check that the volume arriving at the back row is at absolute minimum 75-80 dB. This is a bit louder than converation volume, and people wont sing unless music is louder than their voices. The front row might be 90-95dB at loudest points.

**Your priority** is to make a clean sound at an appropriate volume for the public. Excessive volume is a disturbance for the congregation, and Christian musicians are not actually called to be a disturbance. If the response of the musician is that they can't play quieter, then they can't play in the church, this is not a Rock Concert, it's the House of the Living God!

# Recording 'Live' Performance

- Many occasions only require that you record the Sermon etc. this can be done simply by connecting to the LR Out, so you record what the people hear in the Loudspeakers.
- Should you be required to record live music it will highly unlikely that recording the LR output will sound very good. This is because a lot of the sound from a band playing in a room comes directly off stage and you automatically take that into account as you're mixing.
- Some instruments like drums, saxophones etc may not even have microphones because they're loud enough in the room. Offstage sound, and instruments that aren't connected to the mixer won't be present at the LR output, so you can't record there. If you have the possibility, then you could use a stereo microphone technique to record the entire ambience quite well.
- To get a proper quality music recording you need to have a multi-track recorder and interface. For multi-tracking you connect all your Recorder inputs to the Mixer through the D.O. (Direct Out) connectors on the channels, or more conveniently if you have a split snake (stage box) from a separate mixer on the side where you can connect directly to your Recorder. The multitrack recording can be mixed later, taking all the time you need to mix it well.
- When recording live performers, the biggest problem is the spillage (sound leakage) from the instruments into the adjacent microphones. Musicians and singers who are close to each other will get picked up by each other's microphones. Dividing panels or screens are important here to reduce spillage, or else move them, or the microphone positions.



#### The job of mixing the 'Fold-back' floor monitors principally involves:

- **Personalising a mix for each performer.** Only give them what they need to hear, they only need to hear what they can't hear loudly already. this means every floor monitor will have a different mix. The more you add to Fold-back Monitors, the more difficult it is to hear them. Avoid sending sounds that flood the floor monitor with sound that makes everything muddy. Only send what the musicians ask for. Depending on their position each performer will hear the live instruments and monitors around them.
- **Providing sufficient volume for everyone to perform,** while avoiding feedback and keeping off-stage noise to a minimum. They only need to hear what they can't hear on stage.

**Good fold-backs** allow the musicians to stay together (in time) rhythmically.

Good fold-backs allow singers to sing in tune. To do this they need to hear themselves and the main harmony (chord) instruments well.

**Good fold-backs** allow certain instruments (string and horn players) who don't have exact notes on their instruments to play in tune, for which they need to "hear" the notes of the other instruments to stay in tune with them.

This is all managed by good selection and placement of floor monitors, and good fold-back mixing procedure.



# Plan the fold-back Aux sends from the mixer to the musician's floor monitors... for example:

AUX1: Sends to the 3 front vocal floor monitors.

AUX2: Sends to keyboard floor monitor.

AUX3: Sends to the 2 electric guitar and electric bass floor monitors.

AUX4: Sends to drums floor monitor.

AUX5: Sends to the Reverb Unit.

Agree with the musicians on how to signal you when they want to change something in the floor monitor. There's nothing more annoying than finding yourself in the middle of a performance and some distraught musician is pointing at the floor monitor and giving a whole lot of weird signs and strange lip movements that have no connection with any language you know. You could try:

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

# **Fold-back Monitor Mixing Procedure**

Check that the Aux Send Master knobs are turned up to their zero (unity) mark. Now balance all your floor monitors from this beginning. If things start to squeal later during the performance, you only need to reach up quickly and turn down the Aux Send Masters to stop the squealing. Once the squeal has been sorted it is easy to restore all floor monitors to their previous states by returning the Aux Sends to unity again.

It'll probably never be as loud as they would like... we can't continually raise a Floor Monitor, it will risk squealing. At high volume it causes unnecessary off-stage noise, which interferes with the Front-of-House sound (not acceptable!). If it's never loud enough for a musician (who doesn't have a voice microphone) then put the floor monitor on a chair (right in their face) ... especially drummers.

If there is a drummer, then you probably won't have any requests for drums in the fold-back as the musicians are usually close enough to hear the drums. Some musicians may just want a little kick-drum in the fold-backs, especially the electric bass who has to stay in time with the kick drum. All fold-backs usually need the electric bass and the principal chord carriers (guitar and/or keyboard).

Be prudent... the more instruments you send to a Floor Monitor, the more confused the sound will become, so try and minimize what you send to each. Musicians don't commonly need to hear everything in their monitor.

Bad monitor mixes are one of the first reasons for performers not being able to give a good performance! You need to do all you can to help them hear enough to perform well. It's not easy. Mixing floor monitors is far more difficult than mixing front-of-house, yet strangely it is always the 'assistant' sound technician's role. A good example of making the band comfortable with their monitors begins with how you approach the monitor mix. Monitor Technicians need to communicate... "talk" to the performers.

The vocals need absolute clarity. Most singers will go off-key if they can't hear themselves strongly in their monitors. Only accomplished singers can work without relying on the fold-back to pitch their voice. Singers usually need to hear the electric bass (because it carries the fundamental notes) and the principal chord carriers (guitar and/or keyboard) for them to keep in tune.

A caution about mixing floor-monitors using the PFL meter to get each Aux Send electrically the same... as acoustic levels (the volumes you actually hear) are quite different to electrical levels, if you set up floor-monitor mix electrically it has no bearing on the acoustic result and won't be very nice for the musicians; also, using this method, you typically turn up the Gains higher than necessary inviting feedback squeal.

Obviously, the fold-back can either be sending the aux mixes to the Floor Monitors, or to In-Ear (Earplug) Monitors.

If a *Talk-Back* isn't built in to the mixer you could use a spare channel and turn up all the Auxiliary Sends. A Talk-back is handy for whispering something to the performers in a discrete manner, even during the performance. Talkback is necessary when the stage is some distance from the mixer.



If we are mixing in a small church we don't usually bother with a separate floor monitor mixer, and we just send the fold-back mix to the floor monitors directly through the aux sends. For larger performances where there are many performers and many monitoring requirements, we use a second Sound Technician whose job it is to do all the fold-back work.

This requires a **Split Box** (**Dual Stage Box**) that has a second multicore cable that we can connect to a separate mixer and do independent mixes for the floor monitors. Now the main mixer technician only needs to focus on the Front-of-House mix.

This separate fold-back through a Split Box is called a **Side-Mix**.



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 when artists move about. They are of particular value to lead singers with radio microphones who move about constantly, but all performers say they hear everything much better (and they complain about their floor monitors less).

## IN EAR (EARPLUG) MONITORS

IEMs offer a quality stereo mix with a personal volume control on each bodypack. IEMs sound bright and often lack low frequencies. *They reduce off-stage noise dramatically, creating a cleaner FOH sound.* 

- a) Sound-proof IEMs- completely isolate the person from external noises. They only hear their mix, and little else. This suits very loud stages.
- b) Ambience IEMs- allow the person to hear external sound. This suits an acoustic ensemble sound, or when the artist wants to hear the public.

## Dear Sound Technician,

The Music Team play and sing to us. We play and sing through our sound system to the congregation.
The Ministry Team preach to our microphones. We preach through our sound system to the congregation.
Whether the congregation receive healing, a word from the Spirit for them, and even salvation has a lot to do with the Sound Technician.

How can they believe and receive if they never heard... because the music smothered the words and everything was just loud, boomy and muffled?

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

#### **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**