TECHNICALLY SPEAKING

LIVE PRODUCTION

LIGHTING AUDIO VIDEO LIVESTREAM

LIVE PRODUCTION

LIGHTING AUDIO VIDEO LIVESTREAM

TABLE OF CONTENTS

- **Section 1** Production Ministry Purpose
- **Section 2** Team Member Roles
- **Section 3** ProPresenter (Presentation Program)
- **Section 4** Audio
- **Section 5** Video
- **Section 6** Planning Center
- **Glossary**

1

MINISTRY PURPOSE

EAGLE'S LANDING

LIVE PRODUCTION

LIGHTING AUDIO VIDEO LIVESTREAM

MINISTRY PURPOSE

Live Production does **LIFE TOGETHER** by working as a team to create a worship environment that does not draw attention away from our goal, which is to invite **EVERYONE**, **EVERYWHERE** to know and follow **JESUS.**

CHURCH VALUES

- We Put **JESUS FIRST**
- We Do **LIFE TOGETHER**
- We **PRAY FERVENTLY**
- We **GIVE GENEROUSLY**
- We **LIVE SENT**

THE 7 A'S OF PRODUCTION MINISTRY

Apprised	Be informed about the program and what's trying to be accomplished.
Attentive	Eliminate distractions & "notice" the details (experience what's going on).
Anticipate	Know what's coming up next. (don't be caught by surprise).
Alert	Be ready for changes (they're always a part of any production).
Adept	Be knowledgeable of all equipment, signal chain and program participants (any singers with unique voices, guitars with certain tone, etc.).
Accomodate	Be supportive of the program participants to help them do their best (they're not the enemy).
Adapt	Be ready to troubleshoot & know the proper procedures to follow.



2

TEAM ROLES

There are a number of roles on the Eagle's Landing Production Team. This section gives detailed descriptions and responsibilities of each role.

EAGLE'S LANDING



LIVE PRODUCTION TEAM ROLES

The responsibility of each role will remain the same across all venues. However, not every role will be necessary in every venue.

PRODUCER

This person is the director of the production during the all gatherings or other events.

- They must have an understanding of the flow of the service.
- They are responsible for cuing any videos that will be played during events, cuing shots for the video switcher,
- Oversees all technical aspects during the worship gathering and other events.

Key Note: Be aware of what's coming next. Think ahead.

COMPUTER OPERATORS
(See Section 3 - Computer/Lyrics)

This person is responsible for running ProPresenter, which is a presentation program used for all gatherings and other events.

- ✦ Check song lyrics and sermon notes for spelling and proper placement on screens.
- ✦ Be responsible for getting ProPresenter to the center screen for viewing during worship gatherings and other special programs.
- ✦ Have a high level of competence with ProPresenter and assorted computer functions and processes.
- ✦ Responsible for arriving at the designated time for rehearsal.

Key Note: **Be ahead and not late in punching through slides *(especially for songs)*.**

LIGHTING CONSOLE OPERATOR

This person is responsible for operating the lighting console during all gatherings an other events.

- ✦ They must have a basic understanding of a lighting console.
- ✦ Basic understanding of how to add or remove fixtures.
- ✦ Basic understanding of how to add or remove light cues.
- ✦ Responsible for arriving at the designated time for rehearsal.

Key Note: **Make subtle changes in lights for songs. Remember we want to enhance the experience and not be a distraction.**

VIDEO CAMERA OPERATOR
(See Section 5 - Video)

This person is responsible for operating a video camera and capturing quality shots to be magnified on the video screen.

- ✦ They must have a working knowledge of the basic parts of the camera.
- ✦ Should be physically able to stand or sit for periods of up to an hour and a half and maintain alertness.
- ✦ Must make sure that the camera is set-up properly as well as securing the safety of the camera after each event.
- ✦ Responsible for arriving at the designated time for the worship gathering.

Key Note: **Keep your main subject within the white box. Follow any speakers on stage, listen to the producer's or switcher's cue to respond quickly.**

VIDEO SWITCHER
(See Section 5 - Video)

This person directs the cameras for all gatherings and other events.

- ✦ Must have an understanding of the flow of the service.
- ✦ Must have a working knowledge of all video equipment in the IMAG booth.
- ✦ Be knowledgeable with the switcher.
- ✦ Must have the ability to “call a show” and must be able to give directions and be creative in the production of the service.
- ✦ Be able to multi-task these responsibilities.
- ✦ Responsible for notifying the Production Director of any equipment problems.
- ✦ Responsible for arriving at the designated time for rehearsal.

Key Note: Inform each camera they are live. Be as specific as possible when calling for a shot from a specific camera number. Be patient.

IMAG SHADER
(See Section 5 - Video)

This person is responsible for making sure that all the cameras have the proper lighting contrast before they go to screen or stream.

- ✦ They must have a working knowledge of all equipment in the Video both.
- ✦ Must be familiar with all shading controllers.
- ✦ Responsible for starting the recording deck(s) prior to each worship gathering or event.
- ✦ Responsible for arriving at the designated time for rehearsal.

Key Note: Listen to the producer or switcher call out camera numbers so proper adjustments can be made before the shot goes live.

FRONT OF HOUSE AUDIO ENGINEER
(See Section 4 - Audio)

This person, also referred to as FOH Engineer or simply FOH, is responsible for mixing the house sound during all gatherings and other events.

- ✦ Must be familiar with the “flow of sound” from instrument to mixer to speakers.
- ✦ Must also be familiar with the in-ear monitoring system (IEM) and floor wedge monitoring system used by the band and choir members.
- ✦ Responsible for arriving at the designated time for rehearsal.

Key Note: Be aware of the overall sound level in the room. Be patient with all band members.

MONITOR AUDIO ENGINEER

(See Section 4 - Audio)

This person is responsible for monitoring the mixes for the band, choir, singers, etc. on stage during all gatherings and other events.

- ✦ This person must be familiar with the “flow of sound” from instrument to mixer to speakers or in-ear monitors.
- ✦ Must also be familiar with the monitor systems used by the band and choir members.
- ✦ Responsible for arriving at the designated time for rehearsal.

Key Note: **Be quick to respond to monitor changes from band or singers. Be patient with all band members.**

STUDIO AUDIO ENGINEER

(See Section 4 - Audio)

This person will be responsible for mixing the recording sound to the recording decks and live stream feeds during all gatherings and other events.

- ✦ This person must be familiar with the “flow of sound” from instrument to the mixer to the servers and recording decks.
- ✦ Must be proficient with Logic (recording program).
- ✦ Must be proficient with the recording hardware.
- ✦ Responsible for arriving at the designated time for rehearsal.

Key Note: **Be aware of recording levels throughout the event.**

STAGE MANAGER

This person is responsible for acting as a liaison between the Worship Pastor and other Production positions.

- ✦ Communicate any audio needs from the Worship Pastor, band, and soloist to the FOH Engineer.
- ✦ Assist the band and Worship Pastor in any way possible.
- ✦ Must be a “trouble shooter” when something is not working properly on stage.
- ✦ Must be familiar with the “flow of sound” from instrument to mixer to speakers.
- ✦ Responsible for arriving at the designated time for rehearsal.

Key Note: **Keep lines of communication open *(Text/PCO/Radio)*. Communicate any needs to appropriate positions before, during, and after events.**

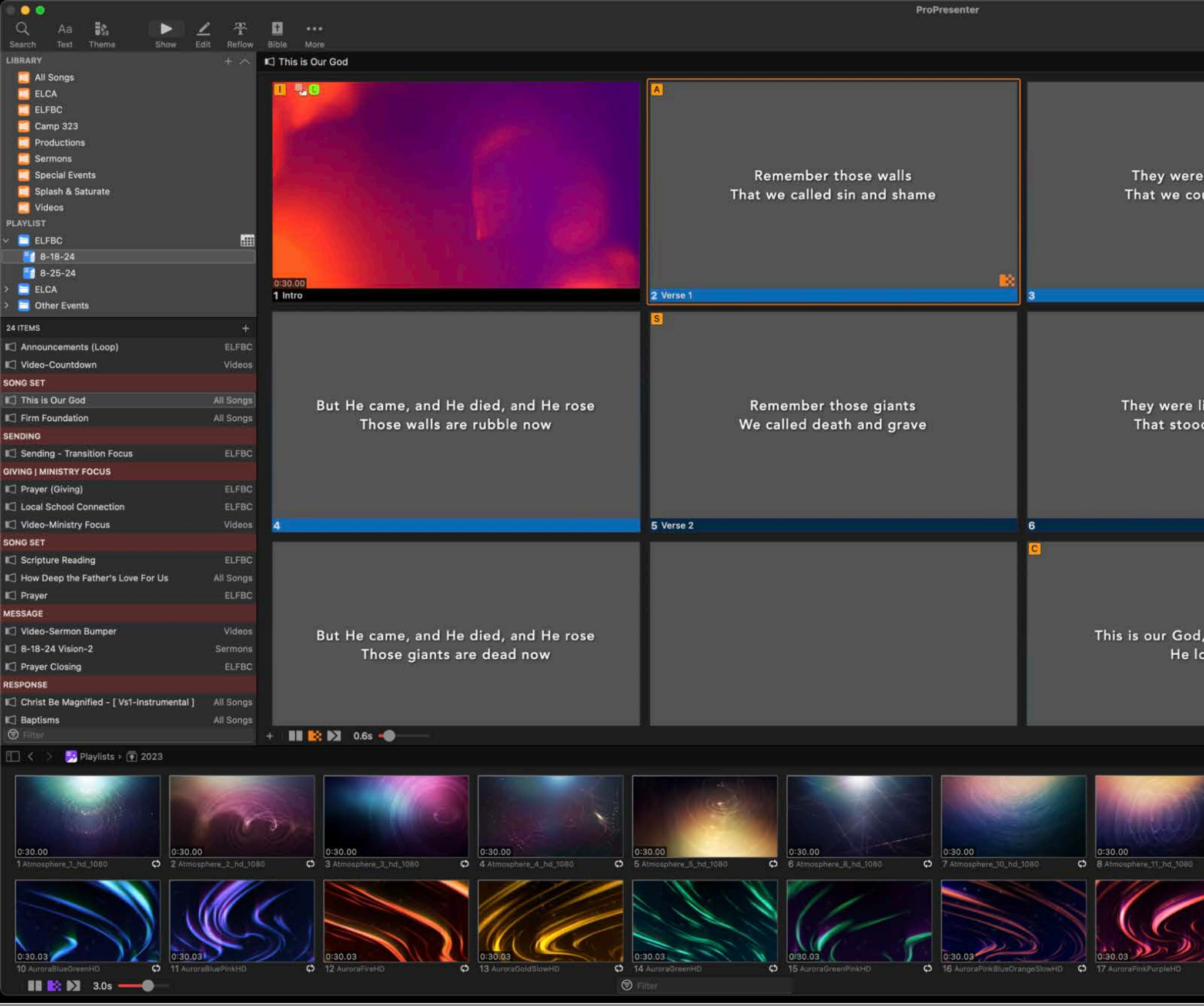


3

PROPRESENTER

Presentations are run on Macintosh-based computers running ProPresenter for all songs, message notes, videos, and other presentations. This section gives detailed instructions on using ProPresenter as well as troubleshooting tips.

EAGLE'S LANDING



PROPRESENTER

WHAT IS PROPRESENTER?

ProPresenter is a cross-platform (Mac and Windows) lyric and media presentation package built specifically to make high-quality live productions easy — such productions include worship gatherings, sporting events, conferences, or even broadcast television. Taking full advantage of the latest technologies, ProPresenter operators control a presentation on one screen, while dynamically affecting the visuals and lyrics experienced by an audience on one or more screens.

REFERENCE GUIDE

LYRICS

- Always have the first slide of the next song on the screen (intro slide with background). This will cue up the “next slide” lyrics for stage screen.
- Plan ahead on starting the next song. If it’s a long intro, then punch in the first slide (background) when intro kicks in. (Follow “LABEL CUES” on certain slides.)
- Be ahead on slide prompts (not too early, not too late).
- For the audience, treat every song as if you have never heard it.
- Always be prepared to skip slides.
- Always be prepared to go back to a particular slide.
- Call out over COM three slides, two slides, and last slide. *(To let everyone know the song is ending for proper transition to the next element of the service.)*

MESSAGE NOTES

- In most cases, leave message points on screen until the next point or Scripture.
- Message point slides normally have two (2) slides.
    - The first slide displays on the main screen and lower third.
    - After a set amount of time ProPresenter is set to automatically transition to the next slide, which will leave the message point on the main screen and clear lower third.
- If a point is made, then quickly transitioned into a Scripture, go back to the point after the Scripture is read *(This gives ample time for people to write it down).*
- Cue Scripture or quote on screen as quickly.
- Clear the Scripture or quote after it is read.
- Be prepared to follow the speaker and skip any necessary slides.

EDITING - CHANGING TEXT, ADDING AND DELETING SLIDES

- Select the file in the library or playlist
- Click the Edit button.
- Select your slide and double click on the text box to make changes.
- When complete press the “Done” button.

EDITING - COPY AND PASTE

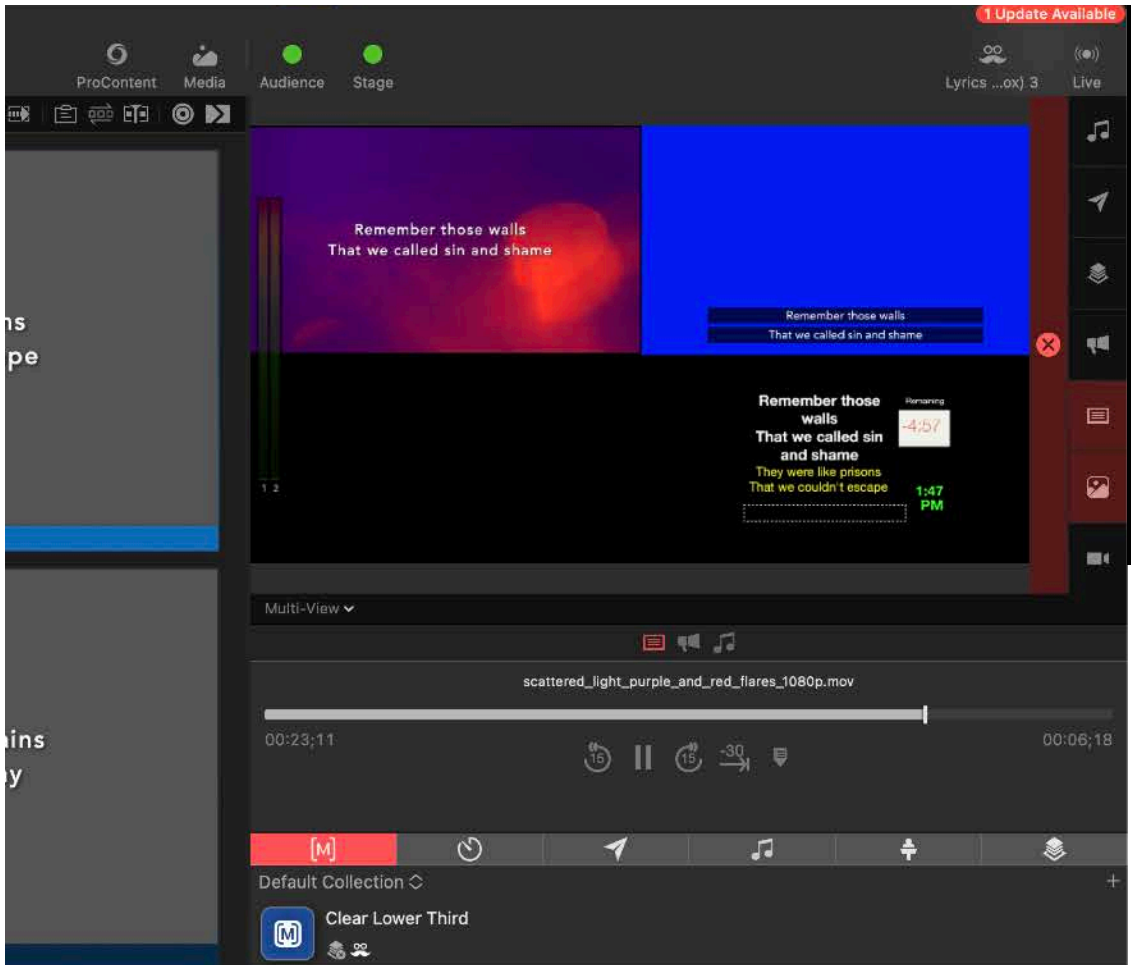
- Make sure you are in the main slide viewer *(all slides for that presentation are visible).*
- To copy a slide, hold down the “command” key, mouse click on the slide(s) you want to copy, then press the “command” and the letter “C” keys to copy.
- To paste a slide, hold down the “command” key, mouse click on the slide where you want the copied slides to follow, and click the “command” and the letter “V” keys to paste.

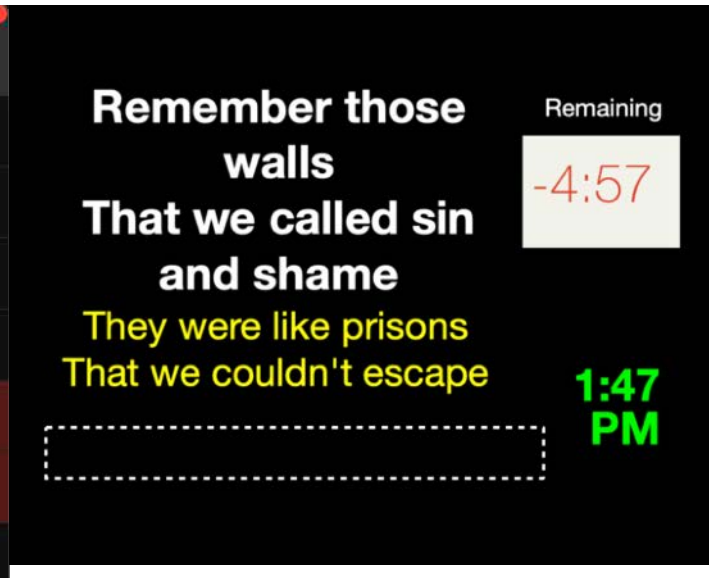
EDITING - MOVING SLIDES

- Make sure you are in the main slide viewer *(all slides for that presentation are visible).*
- Click on the slide and drag-n-drop it to a new location.

EDITING - DISABLING/ENABLING SLIDES

- Make sure you are in the main slide viewer *(all slides for that presentation are visible).*
- Right click on a slide
- Select “Disable” or “Enable”.
- This feature prevents a slide from being viewed when clicking through the slides using the spacebar or arrows. A disabled slide can still be view on the screen by manually clicking on the slide with the mouse.





TROUBLESHOOTING TIPS

Q1. What if ProPresenter suddenly quits?

A1: Try to reopen it from the dock at the bottom of the window. If that doesn't work, then restart the computer.

Q2. What if ProPresenter freezes and will not respond?

A2: Hold down the "command" and "option" keys while pressing the "esc" key (command+option+esc). This will bring up a Force Quit window. Click on ProPresenter and click the "Force Quit" button. Once it's closed reopen ProPresenter. If that doesn't work, then restart the computer.

Q3. What if the computer freezes?

A3: Hold the power button down on back left of the iMac until the computer powers off, then release the power button. Press it again to turn it back on.

Q4. How do you restart the computer?

A4: Click the black Apple logo in the top left corner of the screen, scroll down to and click on "Restart..."

Q.5 What if an image does not appear on the screen?

1. Check to make sure the all HDMI and VGA cables are securely attached to the back of the computer.
2. Make sure the projectors are on.
   - All remotes are labeled and in a basket.
3. Restart the computer. (refer to Q4)
4. Verify with Production Director or Video Switcher that the input is set correctly in the video booth on the switcher.

AUDIO

Audio is key for any event. This section contains a few things that might help when it comes to mixing audio for live events.

EAGLE'S LANDING

12 STEPS TO A SOUND CHECK

STAGE 1: SET UP THE STAGE

- Group instruments and vocals logically when patching cables into the stage. For example, all drum microphones should be in consecutive channels such as 3, 4, 5 and 6. Not 1, 3, 7, and 8. Backing vocal singers in 2, 3, and 4, not 1, 5, and 9. It's easier to deal with sets of similars when they are grouped together.
- Verify all cables are connected correctly by following the signal flow from the instrument / microphone to where it connects into the stage.
- Aim for optimal microphone setups so the microphone picks up the vocal or instrument and not everything around it.
- Make sure the stage is a safe environment by using good cabling techniques, securing cables on the stage, and placing equipment out of walkways.

STAGE 2: PERFORM THE LINE CHECK

- Verify all sound sources on the stage are sending a signal.
- In the case of signal problems, check the signal flow and ensure all equipment on the stage is correctly connected. This is where most problems occur. Also, check any equipment that requires batteries (microphones, IEMs, guitars, tuners, etc.).

STAGE 3: SET THE PROPER GAIN STRUCTURE

- Make sure you are getting the clearest signal from the stage when you have the fader set at 0.
- In the case of stage equipment that's giving you too strong of a signal, if available use the pad option on the direct box or instrument to cut the signal strength to a more controllable level.
- Aim for gain-before-feedback so you are getting a clear signal but not so strong of a signal that it causes easy feedback in the system if the source volume gets too loud.

STAGE 4: SET THE PRE/POST OPTIONS

- A pre-aux send delivers the signal out of the mixer before it passes through the channel fader.
- A post-aux send delivers the signal out of the mixer after it's gone through the fader.
- Pre-aux sends should be for monitors. Everything else will likely be post- aux.

STAGE 5: SET THE GROUPING

- Place channels into logical groups for easy control.
- Consider grouping channels into instruments, vocals, guitars, tracks, etc. Group all drum kit pieces together.
- Make sure the DCA group fader is active.

STAGE 6: VOLUME BALANCING

- Set the volume of the instruments and vocals to how they should be in the song mix. Start by setting the kick drum and bass volumes. Build until you finish with the vocals.
- Optionally, set the kick drum/bass volume and then add in the vocal volume where you think it should go. Layer all other instrument volumes under the vocal level.

STAGE 7: SET THE MONITOR MIXES

- Assist musicians with monitor mix.
- When a musician asks for more of something in their mix and it's maxed, then ask if there is something you can reduce instead.

STAGE 8: INITIAL EQ WORK

- Use the low-pass and high-pass filters where appropriate and perform any slight EQ tweaking to eliminate stray sounds.
- Start with the kick drum and EQ it to how you want. Move to the bass and then through the instruments until you get to the vocals.
- Aim for a good overall sound.

STAGE 9: BUILDING THE MIX

- Start EQ'ing instruments against each other. It's ok if an instrument doesn't sound perfect by itself. As long as it fits in the mix so the overall mix sounds right.
- Instead of boosting a frequency for an instrument, look for a similar frequency you can cut from a different instrument.

STAGE 10: CREATING CONTRAST

- Don’t make two acoustic guitars sound the same, get creative. Try EQ’ing each so you bring out the natural characteristics of each guitar.
- If you two acoustics, then try panning one slightly left and the other slightly right.
- Any time two instruments blend together, consider which needs to be more prominent in the mix. Then work towards moving the other to a lesser position through EQ and even volume changes.

STAGE 11: COMPRESS IT, ‘EFFECT’ IT, AND REVERB IT.

- Add in any compression you need that will benefit a particular channel such as snare or a vocal channel.
- Add in any other effects that benefit the mix. Effects are NOT used as a means of replacing the EQ process. They are effects on a sound, not a means of EQ'ing a sound.
- Only after adding all other effects, add in reverb if you need it.

STAGE 12: WALK THE ROOM

- While the band is playing a song, walk the room and listen for volume and frequency imbalances in different parts of the room.
- Modify your mix for a more consistent sound throughout the room.
- Walk it one last time to confirm your mix changes were good.

*NOTE: TAKEN FROM “AUDIO ESSENTIALS FOR CHURCH SOUND”

EQ STARTING POINTS

INFO

The information provided here is not a formula for mixing. These are the basic frequency ranges of the standard needs like power and impact and clarity. This information should only be used as a starting point for the EQ process if you are having difficulties establishing a mix. Please note it's best to try cutting before boosting.

BASS

40 Hz – 100 Hz: Boom (a good place to cut more than boost)
100 Hz – 250 Hz: Power and impact
200 Hz – 1 kHz: Clarity
1 kHz – 6 kHz: Presence and attack
8 kHz+: Sizzle (as much sizzle as you can get from a bass)

KICK DRUM

40 Hz – 80 Hz: Boomy / thump
40 Hz – 200 Hz: Power and impact
500 Hz – 1.5 kHz: Clarity and solidness (likely to cut for clarity)
2 kHz – 6 kHz: Attack, snap, "Thwack"

SNARE DRUM

< 125 Hz: Cut to reduce extra thump to separate from kick.
100 Hz – 450 Hz: Depth and fullness
800 Hz – 3 kHz: Bang ("I just wanna bang on the drum all day")
3 kHz – 8 kHz: Crispness / bite.
4 kHz+: Snap

Snares are tricky but when you find that sweet spot, you'll know it.

TOMS

< 100 Hz: Rumble
300 Hz – 800 Hz: Ring
1.5 kHz – 5 kHz: Crack / attack

There are a lot of ways to work the Toms so they give you the sound you want.

CYMBALS

2 kHz – 6 kHz: Crisp / crash
6 kHz +: Shimmer / splash
800 Hz – 5 kHz: Cut to reduce harshness

Consider cymbals as accent instruments so blend them in appropriately.

ELECTRIC GUITAR
<1 kHz: Heavy sound (Especially if guitar with distortion)
<1 kHz: Cut for clarity
100 Hz – 400 Hz: Depth
4 kHz – 7 kHz: Attack / bite
9 kHz +: Airy

Dealing with an electric guitar with a lot of distortion, a bass, and a drum kick, cut the low-ends in the guitar for overall band clarity.

ACOUSTIC GUITAR
< 500 Hz: Body (cut for clarity)
2 kHz – 8 kHz: Attack and presence
7 kHz +: Sparkle

*Note: EQ changes depend a lot on the natural guitar sound.

PIANO
The piano requires little in the way of EQ. Focus on minor bumps in higher frequencies to stand out in the mix and minor cuts in low end if competing with a lot of low-end instruments.

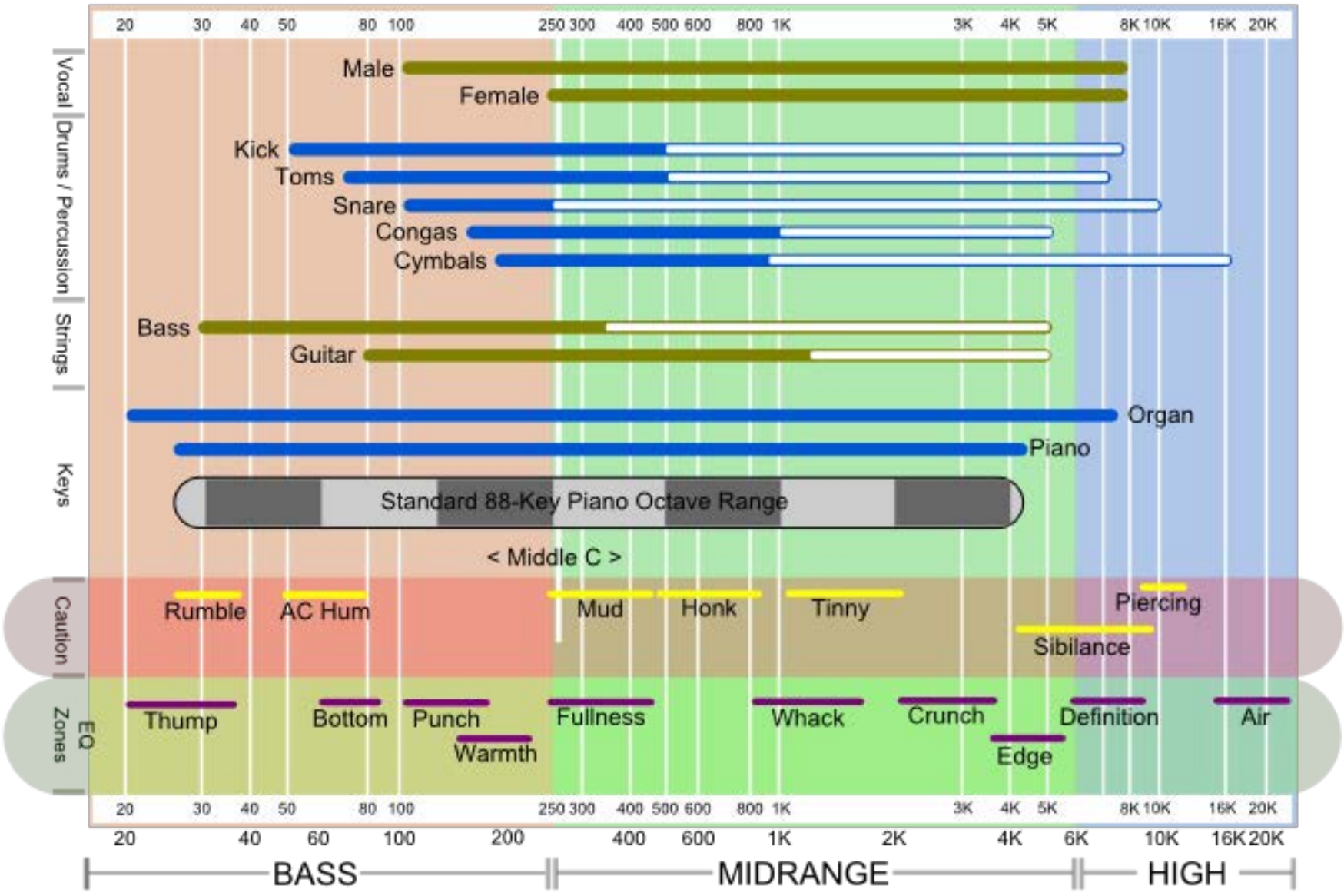
KEYBOARD
Much like the piano, this is an instrument you should alter once all the other instruments are in the mix. Focus on two areas only if you need to add them in; the 450 Hz area to add warmth and the 2 kHz – 6 kHz range for clarity. When you get into keyboards for sound pads, then you have to just go by fit and feel.

VOCALS
< 200 Hz: Cut for clarity
150 Hz – 600 Hz: Warmth
500 Hz – 2 kHz: Nasal (Cut to eliminate)
3 kHz – 5 kHz: Sibilance (Cut to eliminate)
1.5 kHz – 8 kHz: Clarity and Presence
10 kHz+: Airy (Breathy)

Generally, you can engage a high pass filter (HPF) to cut frequencies below 100 or 80 Hz. This will also help cut out stage volume wash of low-end instruments into the microphones. Don't use the HPF if you have someone who can really sing that low.

EQ Reference Guide

(Common Instruments)



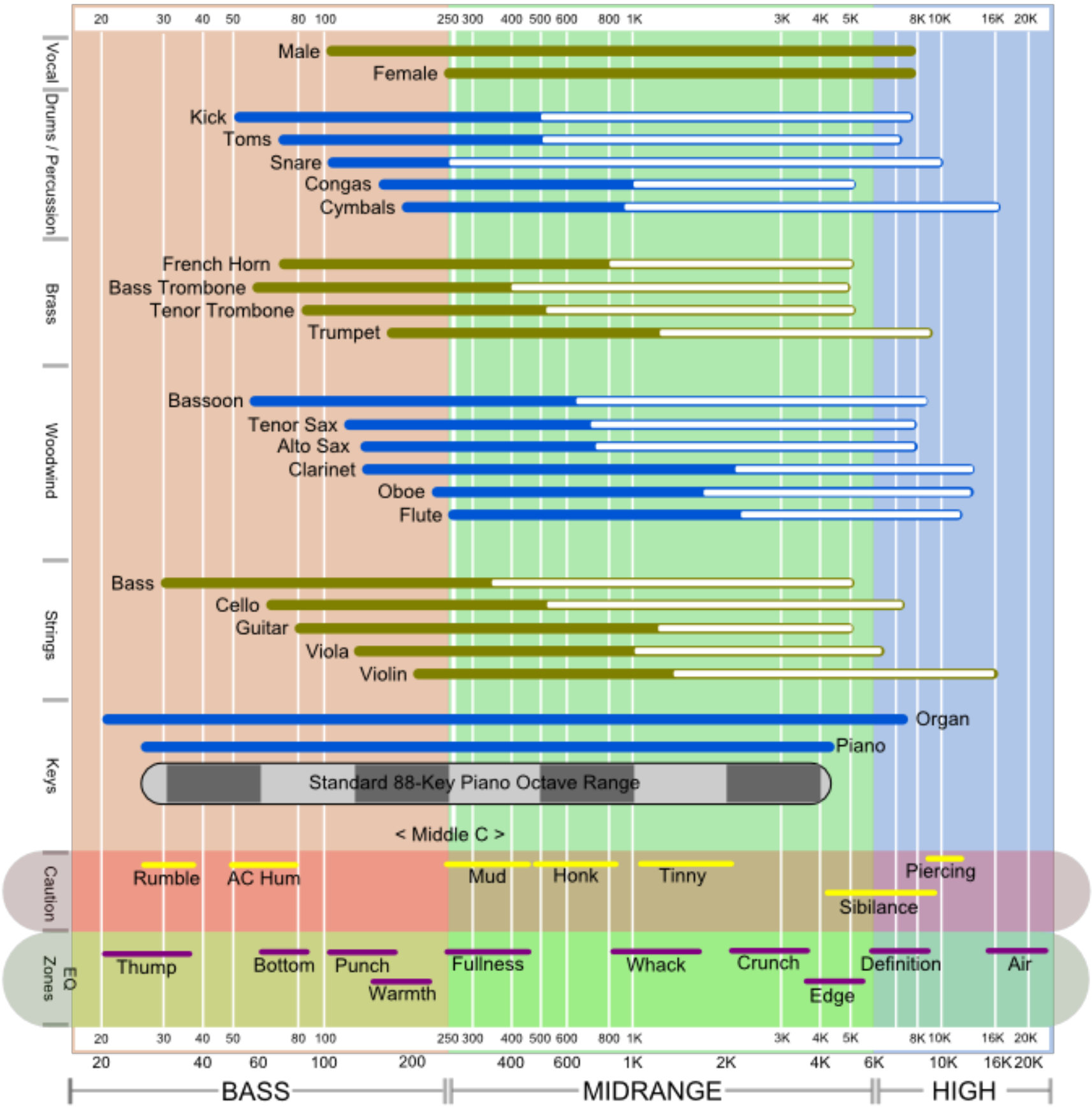
EQ Lines;

- Solid: fundamental frequencies
- Outlined: harmonic frequencies

Caution Range: Frequency ranges where problems can be found / caused.

EQ Zones: Frequency ranges for aiding the mix.

EQ Reference Guide



EQ Lines;

- Solid: fundamental frequencies
- Outlined: harmonic frequencies

Caution Range: Frequency ranges where problems can be found / caused.

EQ Zones: Frequency ranges for aiding the mix.

TOP LINE CHECK PROBLEMS

Keep these in mind, along with their solutions, the next time you have a problem during your line check process.

1. **Bad cable.** Cables go bad and if you don't test your cables on a regular basis, then the issue will most likely show up during a line check. A cable tester can tell you when a cable has gone bad as well as the issue with the cable. Keep spare cables of all types because you will need them.

2. **Bad connection.** Plugs aren't always pushed in all the way. A simple re-seating of the plug should resolve the problem. This goes for all cable connections including XLR, TS, and TRS.

3. **Dead batteries.** These might be in an effects box, on-board EQ/Amp, acoustic guitar, or tuner. It’s helpful to have some batteries available. Therefore, keep a few 9V and AA batteries in the booth.

4. **Wrong wiring.** Plug A into B, not C. Following the signal from the source to the mixer, you should be able to find where the wires are plugged into the wrong place. Typically, an input is plugged into an output or wrong snake channel.

5. **Poor microphone location.** While you might see a signal, if it's not in the right location, you might not get enough signal for proper gain structure. If the microphone is too far away you might not get any signal. Microphone placement is key.

6. **Broken equipment.** Equipment will break. If it works “most of the time” then it’s time to repair or replace it. Local repair shops can do in our out of warrant repairs. Some can be sent directly to the manufacturer for repair or replacement.

7. **Channel labeling.** Of course there's no signal, nothing is in that channel! Just correct it and move on.

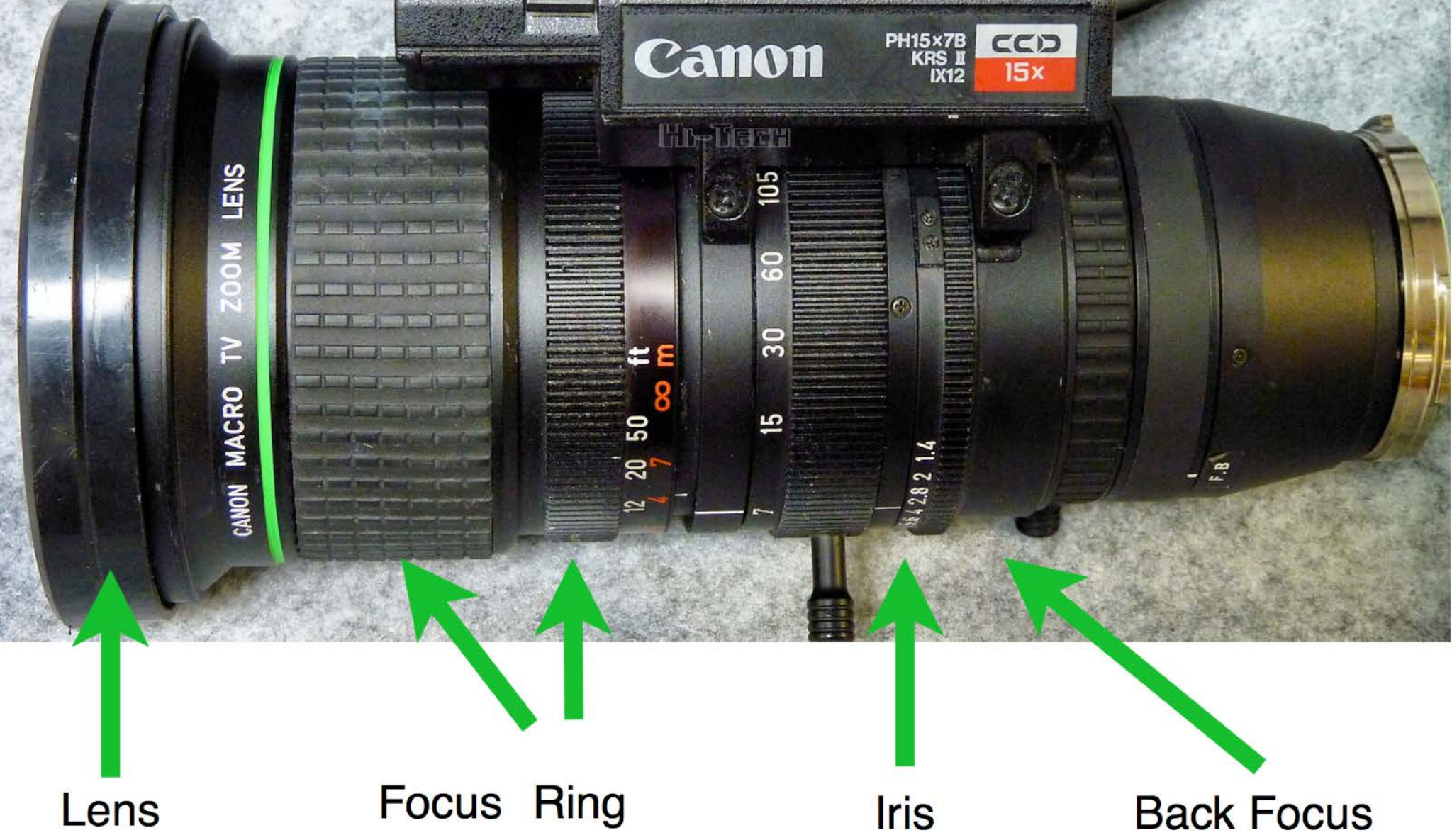
8. **No signal from guitar/bass.** This happens when they turn down their volume pedal, have their rig set for tuning, or have done something else to disable their rig from sending a signal. Ask them to check their volume pedal and any effects / board options like being set to tune or mute.
   *Note: Could also be bad cable, connection or channel.

9. **Bad mixer channel.** This is the most frustrating as it will result in spending money and probably require a replacement board to be used for a while. When it does happen, try another channel and mark the channel as bad.
   *Note: Some repair shops will do in-house quotes and repairs. However, this could result in a higher fee, but may also result in a quicker repair of the console.

VIDEO

This section contains a basic overview of the camera, shader, and switcher positions.

EAGLE'S LANDING



THE CAMERA AND ITS OPERATION

THE CAMERA LENS

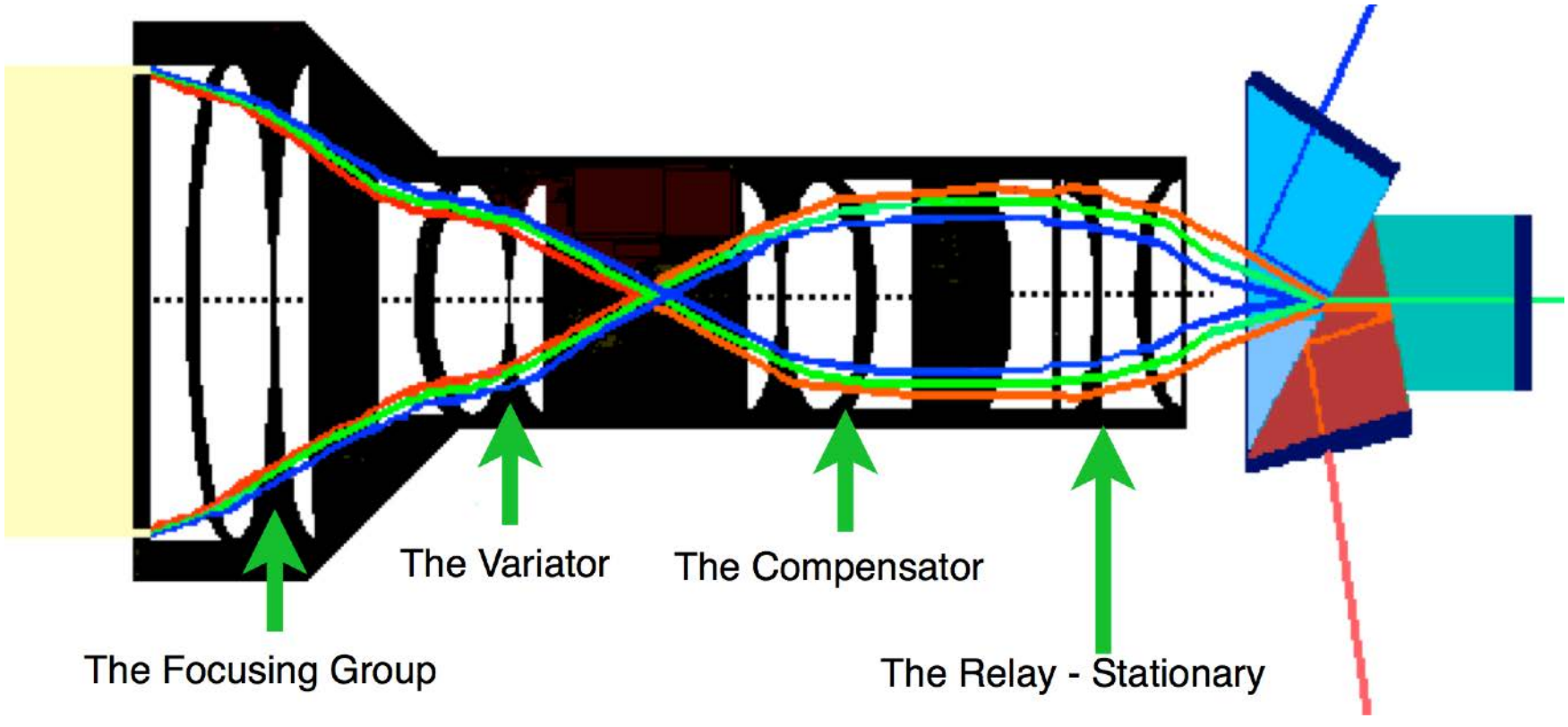
THE LENS
This is the forward piece of the device that made of Glass and is the moving part of the zoom lens allowing the camera to create a sharp image to the CCD block of the camera.

THE FOCUS RING
This is the Rotating piece of the device that moves the Glass and creates.

THE IRIS RING
The iris is an adjustable opening (aperture), which controls the amount of light coming through the lens (i.e. the "exposure"). The video camera iris works in basically the same way as a still camera iris -- as you open the iris, more light comes in and the picture appears brighter.

THE BACK FOCUS
This is the back lens of the assembly that is fixed for studio operation but may be maneuvered to allow for macro or ultra close up imagery.

THE PARTS - INTERNAL



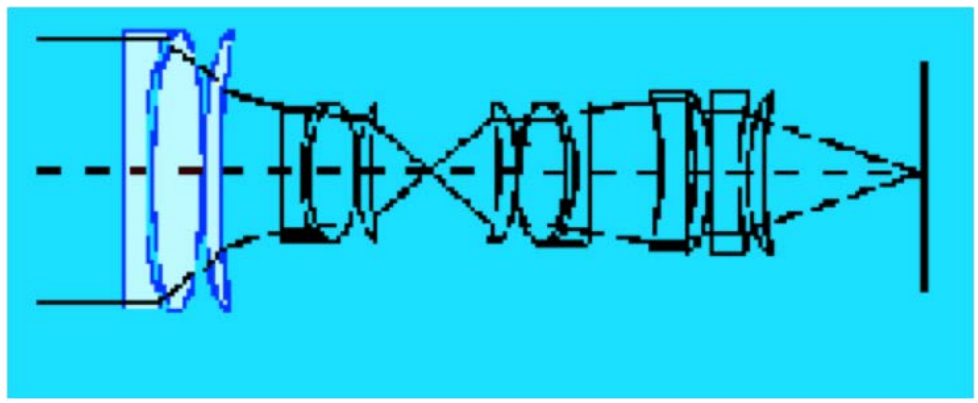
A zoom lens is a lens that can have it's focal length continuously change without losing it's focus. The name, zoom, comes from the strong visual impression that makes it appear as if the viewer were "zooming" towards an object or image as if in a fighter plane. How does does this all work? Here is an explanation.

When you hold a fixed focal length lens in your hand, you know that changing the distance between the lens and the object, changes the size of the image along with the focus of the image. So, each time you move, you have to refocus and reframe the image . If two lenses were combined, by moving them in coordination it is possible to change the distance between the lens and the object and still retain the focus of the object.

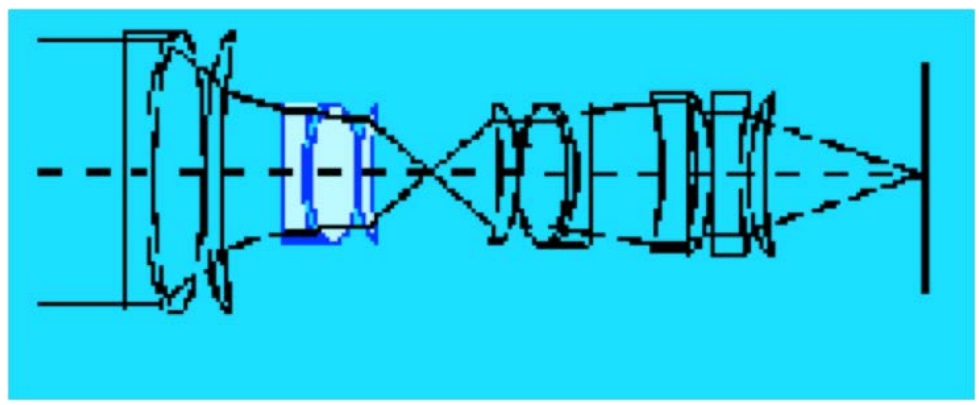
The zoom lenses used in broadcast or professional video cameras are much more complex than the "two lens" theory, but the basic principle remains the same; move one part of the lens system to change the size of the image, and move another part to keep it in focus.

At the wide-angle end of the zoom, the variator is moved forward, creating a retrofocus type of lens structure. At the telephoto end, the variator is moved back, so the lens structure resembles the telephoto type. To keep the image in the same position as the two lens groups move, the lens groups must move along precise curves determined by the laws of geometric optics. The motion of the variator and compensator is controlled by the barrel cam mechanism. The normal hand-held zoom lens has a divergent variator and a divergent compensator. The track followed by the compensator takes it forward, then back.

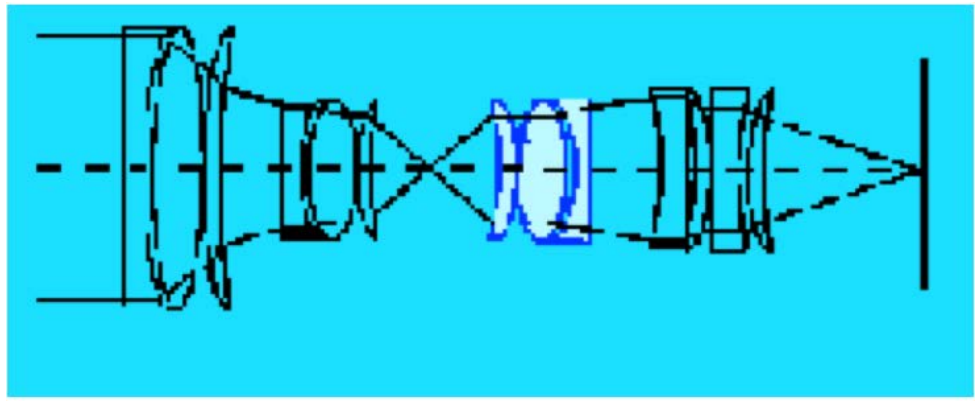
The optical path of a hand-held zoom lens has a four part structure. The first group is called the focusing group, because it is used to focus the image.



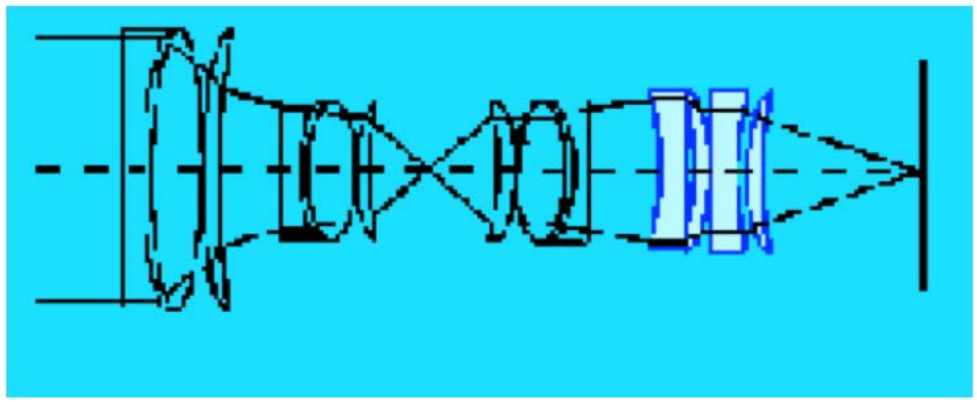
The second group is the variator that changes the image size.



The third group is the compensator that maintains the focus.



The fourth group is a stationary lens group called the relay lens.



THE ZOOM RATIO

The zoom ratio is the ratio of the focal length at the telephoto end of the zoom to the focal length at the wide-angle end. The zoom ratio indicates how much the size of the image on the monitor can be changed. If a zoom lens has a zoom ratio of lOx, the image it gives at the telephoto end will be magnified exactly 10 times as much as the image at the wide-angle end. You can use the model numbers on the lens to determine it's zoom ratio. An A16X8.5 or J16X8.5 is essentially, at the telephoto end, 16 times 8.5 millimeters.



The larger the zoom ratio is, the more the size of the image can be changed. It is important to select an appropriate zoom ratio. A large zoom ratio is desirable, but it also makes the lens bigger and heavier.

THE F-STOP

An item of equal importance with the focal length is the F-stop/number, which indicates the brightness of the image formed by a lens. A smaller F-stop means a brighter image. The F-stop is closely related to the depth of field. For a given focal length, the larger the aperture of the lens is, the smaller its F-number is.

The iris ring of most lenses are marked with a series of numbers with a ratio of 1:1.4, 1.7, 2, 2.8, 3.5, 4, 5.6, 8, 11, 16, 22. The brightness of the image is inversely proportion to the square of the F-number. Each time the ring is turned one number up the F scale, the brightness is decreased by half. As the iris ring is turned down one number, the brightness is increased by twice.

STUDIO EQUIPMENT

THE STUDIO VIEWFINDER

This is the element that allows the operator to focus, frame and follow the action that the director desires to communicate to the viewer.





THE REMOTE ZOOM CONTROL

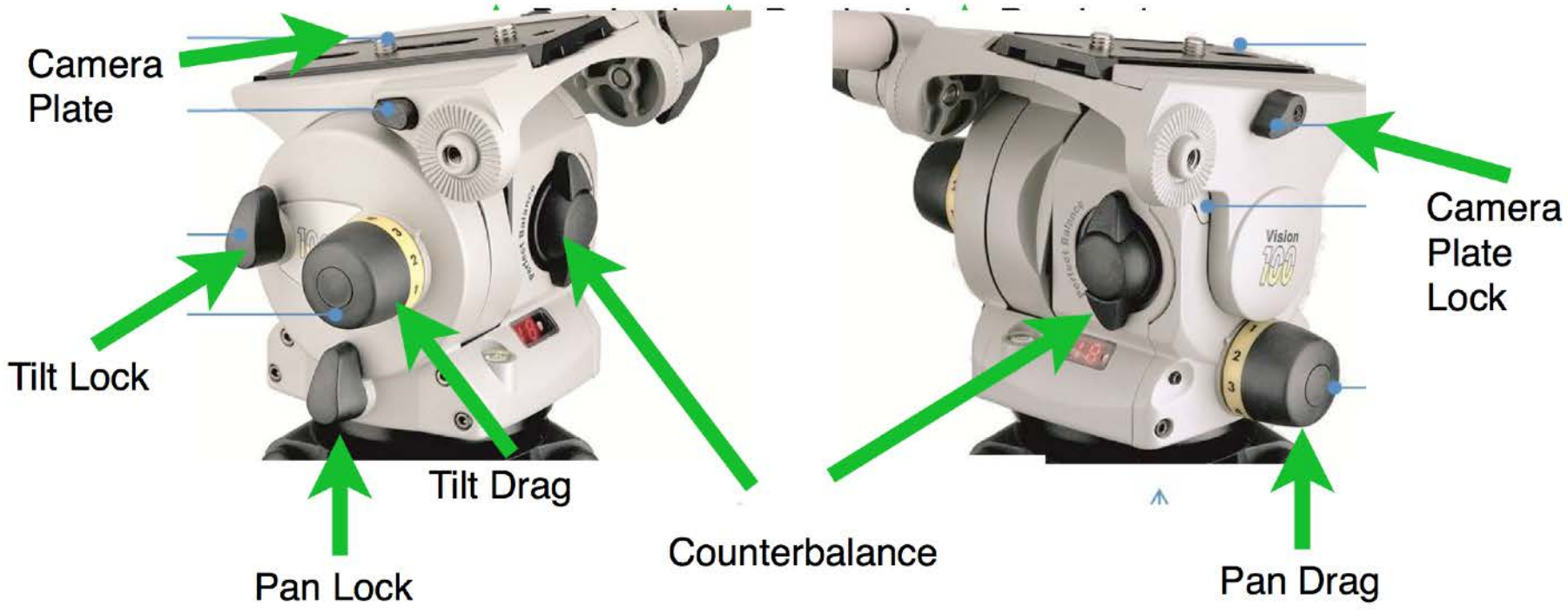
A mechanical control of the zoom motor on the lens. It enables the operator to control the speed at which the lens magnifies the image being transmitted.

THE FOCUS CONTROL
A cable driven device that manually moves the focus group in the lens to create a sharp image on the CCD block.





THE FLUID HEAD
Fluid heads are the dominant tripod heads used in the video and motion picture industry. They provide extremely smooth free movement, even with the heaviest of filmmaking and professional video cameras. The fluid reduces the risk of the camera operator introducing any jerkiness or vibration to the shot during a pan or tilt through dampening, and also reduces the friction between moving parts of the head. As the size of high quality video cameras has become greatly reduced, there are now fluid heads designed even for consumer camcorders, which are being used increasingly in television production environments.



CAMERA PLATE
The plate that joins the camera and fluid head. This fits on the camera mounting shoe and is adjustable forward and backward to allow the camera to balance on the head.

TILT LOCK
A rotating knob that locks the cameras ability to tilt up and down.

TILT DRAG
This controls the pressure needed tilt the camera up and down.

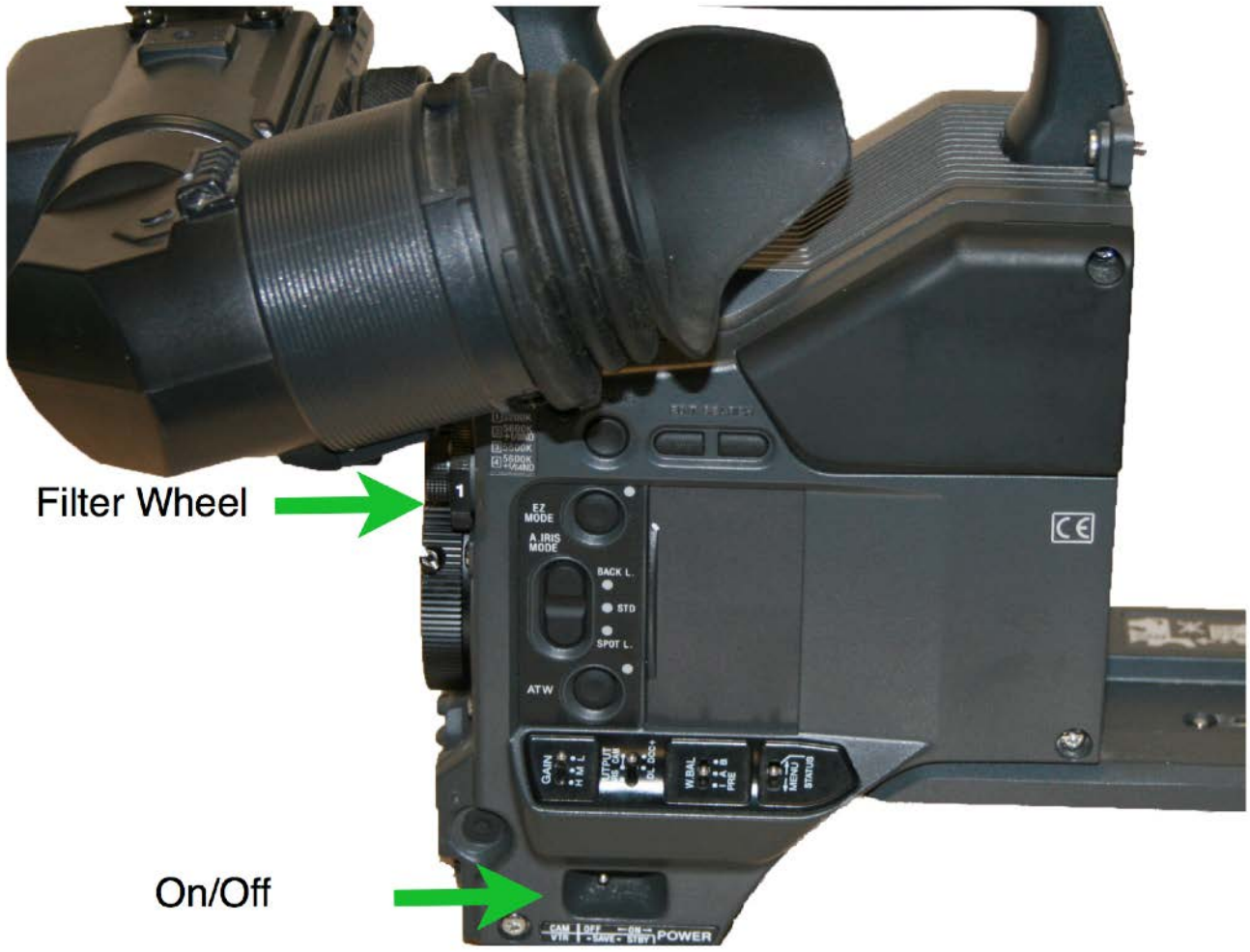
PAN LOCK
Allows the operator to lock the left and right panning ability of the fluid head.

PAN DRAG
This controls the pressure needed pan the camera left and right.

PLATE LOCK
Locks the camera plate to the fluid head

COUNTERBALANCE
This adjustment allows exactly the right amount of torque to be generated at whatever angle the camera is positioned. Compensating for the effect of gravity, The Counterbalance makes the camera appear weightless in the hands of the camera operator. And, as it balances perfectly the drag control can be used for what it is intended to do: shot framing and control, rather than helping to balance the camera.

THE CAMERA HEAD



FILTER WHEEL
A rotating behind-the-lens filter wheel, for selecting an 85A and neutral density filters. This corrects for the color temperature of light that hits the CCD block.

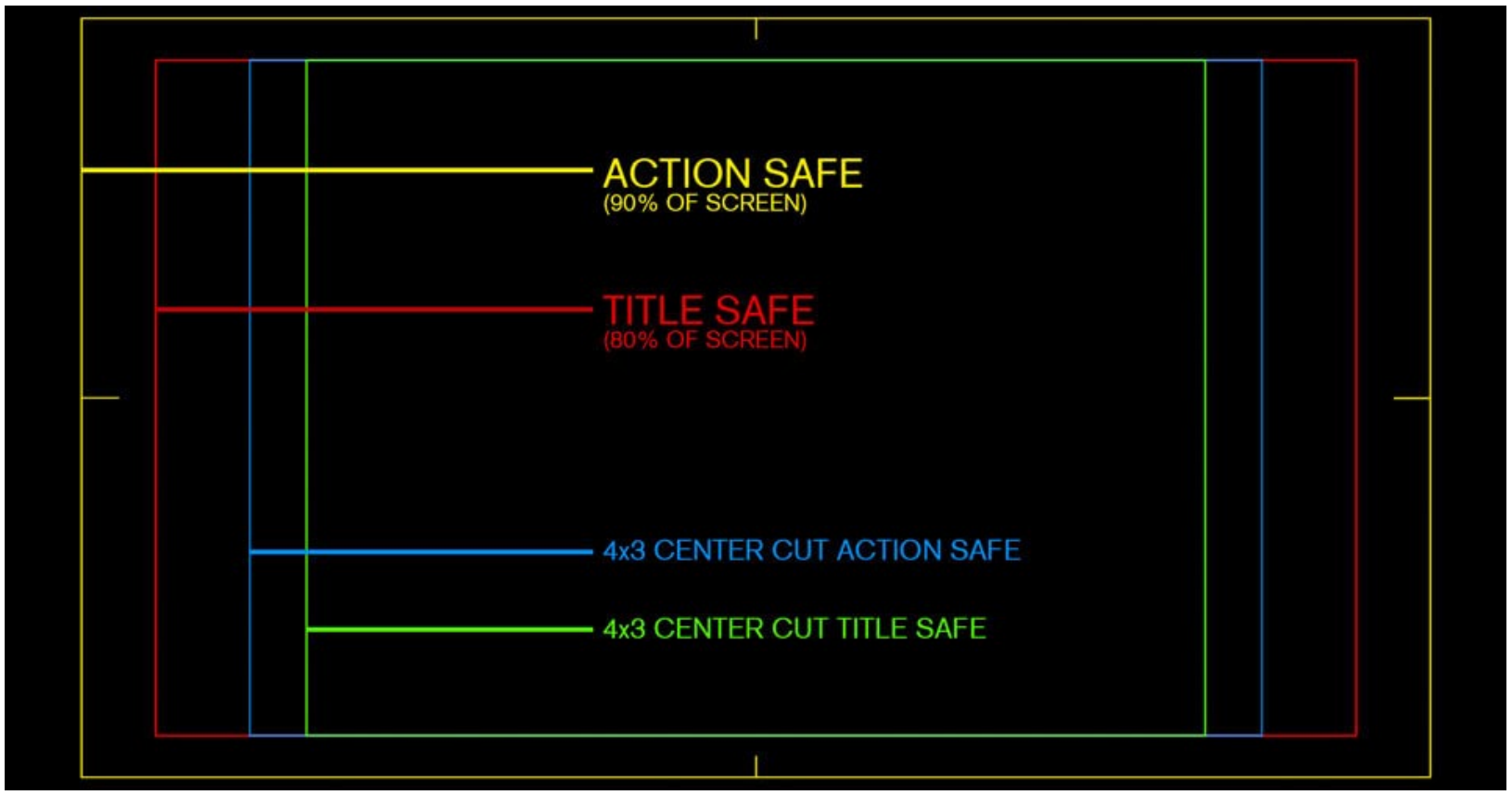
OPERATING THE CAMERA

RULES OF THE ROAD

Rule #1: Focus then Frame

Without Exception the camera operator must always zoom as close as possible and focus before framing the shot.

Rule #2: Frame Using the Tools Available in Your Viewfinder.



Action Safe:

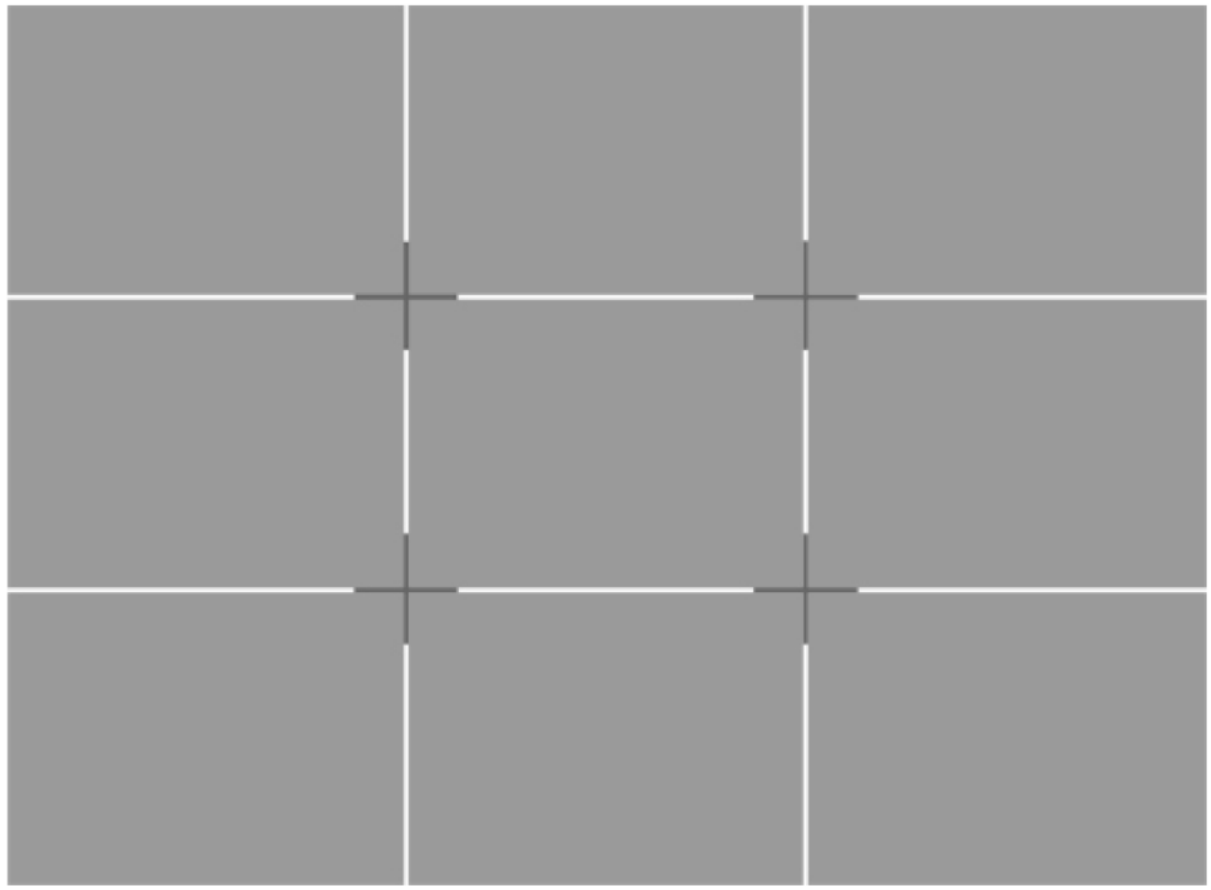
The image contained inside these markings is what will be transmitted from a television station. However, not all of the transmitted picture actually shows up on a screen or TV.

The Safe Title Box

The image inside the Safe Action marking box will most likely appear on all home television sets. Any part of the image you want to be sure 'makes it home', as they say, should be kept inside the Safe Action box.

Rule #3: Frame Using “The Law of Thirds.”

The rule of thirds is one of the main “rules” in art and photographic composition and stems from the theory that the human eye naturally gravitates to intersection points that occur when an image is split into thirds.



It is the process of dividing an image into thirds, using two horizontal and two vertical lines. This imaginary grid yields nine parts with four intersection points.

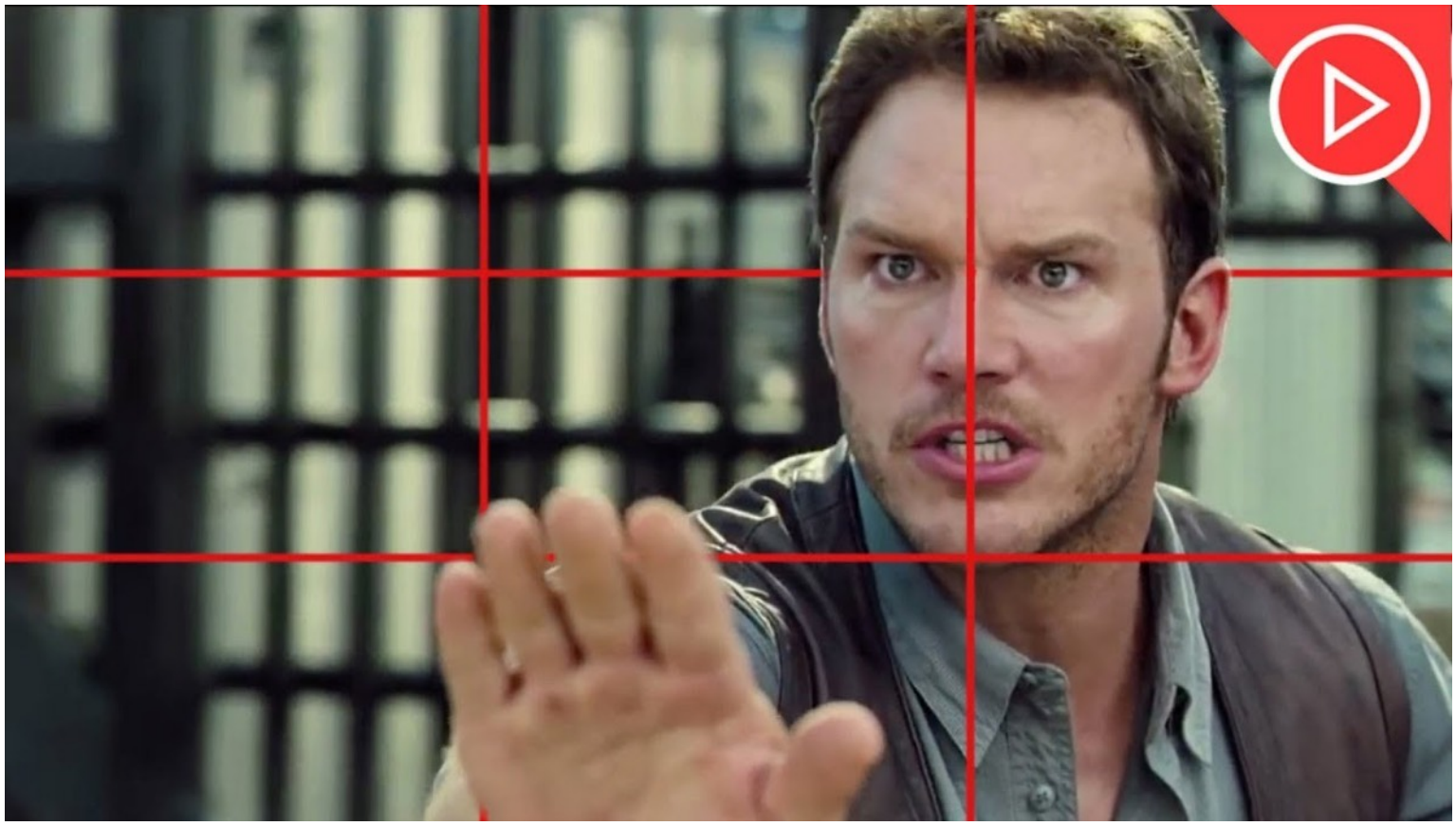
When you position the most important elements of your image at these intersection points, you produce a much more natural image. It is also suggested that any horizon is placed on either the top horizontal line or bottom horizontal line.

Off-center composition is pleasing to the eye because it’s typically where the eyes go first. When there is a subject or object off-center, it also gives viewers the ability to interact with that space between them. This allows for interpretation and conversation between the subject and the background, as opposed to a fully centered subject.

In most "people shots", the main line of interest is the line going through the eyes. In this shot, the eyes are placed approximately 1/3 of the way down the frame.

Depending on the type of shot, it's not always possible to place the eyes like this.

When being directed for framing the director will often refer to giving the subject nose room or look space. This refers to giving space to the side of the frame that the subject is looking towards.







Rule #4: Follow the Action

Camera operators should mentally focus on the action that is taking place at the event that they are covering. This means monitoring the action and constantly adjusting the camera and keeping the proper framing at all times.

Rule #5: Pushing in or pulling out should be in the tempo of the speaker or music.

Slow action means slow and subtle lens movement and faster or up tempo means slightly faster movement. NEVER DISTRACTING THOUGH.

What is a PUSH or PULL?
Push and Pull refers to zooming the camera lens in or out. PUSH IN for zoom in and PULL OUT for zoom out.

6

PLANNING

This section gives more detail on weekly scheduling and planning for all production teams.

EAGLE'S LANDING

planning center

services

Planning Center Services (www.PlanningCenterOnline.com) is an online system that allows you to manage your schedule, update contact information, and access plans and files. All scheduling and planning of worship gatherings and other events takes place through Services.

How to Access the Mobile App

With the Services mobile app, you can manage your schedule or prepare for the event. You can install the Services mobile app to your device from:

- Apple App Store
- Google Play

WHAT CAN I DO IN SERVICES?

- You can manage your schedule, update your information, and access service information from the Services web or mobile app.
- Manage the schedule for yourself and your household from your My Schedule page.
- Accept or decline scheduling requests.
- Block out dates that you know you will be unavailable to serve.
- Update personal information from your profile.
- Manage your scheduling preferences.
- Update your contact information and profile picture.
- Reset your password.
- Set up text messaging.
- Access plans and files.
  Demos for songs are loaded into Services, along with lyrics and message notes.

Introduction to Planning Center

Read this article and watch the video to learn how to access Services from the mobile app, and how to make the most of your account and know what to expect.

COPYRIGHT

Updated 8/24/24

© 2024 Eagle's Landing Productions

All rights reserved. No part of this publication may be reproduced in any form without written permission from Eagle's Landing First Baptist Church
2400 Highway 42 North,
McDonough, GA 30253.
www.eagleslanding.org

EAGLE'S LANDING

Unless otherwise identified, all Scripture quotations are from The Holy Bible, English Standard Version® (ESV®), copyright © 2001 by Crossway, a publishing ministry of Good News Publishers. Used by permission. All rights reserved.

AMBIENT LIGHT

The light already present in a scene, before any additional lighting is added.

Related Glossary Terms

Index

BACK FOCUS

This is the back lens of the assembly that is fixed for studio operation but may be maneuvered to allow for macro or ultra close up imagery.

Related Glossary Terms

Focus Ring, Lens

Index

BACK LIGHT

A light placed at the rear of a subject to light from behind.

Related Glossary Terms

Index

BARN DOORS

A device that fits on the front of the light to block part of the beam.

Related Glossary Terms

Index

CINE-FOIL

Black aluminum wrap used to control light.

Related Glossary Terms

Index

COLOR TEMPERATURE

A standard of measuring the characteristics of light, measured in kelvins.

Related Glossary Terms

Index

CONTRAST RATIO

The difference in brightness between the brightest white and the darkest black within an image.

Related Glossary Terms

Index

FILL LIGHT

A light placed to the side of the subject to fill out shadows and balance the key light.

Related Glossary Terms

Index

FLEX FILL

A flexible fabric device used to reflect light. Often used in daylight to act as a fill source.

Related Glossary Terms

Index

FLOOD

A broad beam of light, less directional and intense than a spot.

Related Glossary Terms

Index

FOCUS RING

This is the Rotating piece of the device that moves the Glass and creates.

Related Glossary Terms

Back Focus, Lens

Index

FRESNEL

A light which has a lens with raised circular ridges on its outer surface. The fresnel lens is used to focus the light beam.

Related Glossary Terms

Index

HALOGEN

Type of lamp in which a tungsten filament is sealed in a clear capsule filled with a halogen gas.

Related Glossary Terms

Index

HARD LIGHT

Light directly from a source such as the sun, traveling undisturbed onto the subject being lit.

Related Glossary Terms

Index

INCANDESCENT

Incandescent lamps produce heat by heating a wire filament until it glows. The glow is caused by the filament's resistance to the current and is call incandescence.

Related Glossary Terms

Index

INCIDENT LIGHT

Light seen directly from a light source (lamp, sun, etc.).

Related Glossary Terms

Index

IRIS RING

The iris is an adjustable opening (aperture), which controls the amount of light coming through the lens (i.e. the "exposure"). The video camera iris works in basically the same way as a still camera iris -- as you open the iris, more light comes in and the picture appears brighter.

Related Glossary Terms

Lens

Index

KEY LIGHT

The main light on the subject, providing most of the illumination and contrast.

Related Glossary Terms

Index

LENS

This is the forward piece of the device that made of Glass and is the moving part of the zoom lens allowing the camera to create a sharp image to the CCD block of the camera.

Related Glossary Terms

Back Focus, Focus Ring, Iris Ring

Index

REFLECTED LIGHT

Light seen after having bounced off a surface.

Related Glossary Terms

Index

SOFT LIGHT

Light which appears to “wrap around” the subject to some dregree. Produces less shadows or softer shadows.

Related Glossary Terms

Index

SPOT

A controlled, narrowly-focused beam of light.

Related Glossary Terms

Index

TUNGSTEN

Light from an ordinary light bulb containing a thin coiled tungsten wire that becomes incandescent (emits light) when an electric current is passed along it. Tungsten color temperature is around 2800K to 3400K. Also known as incandescent light.

Related Glossary Terms

Index