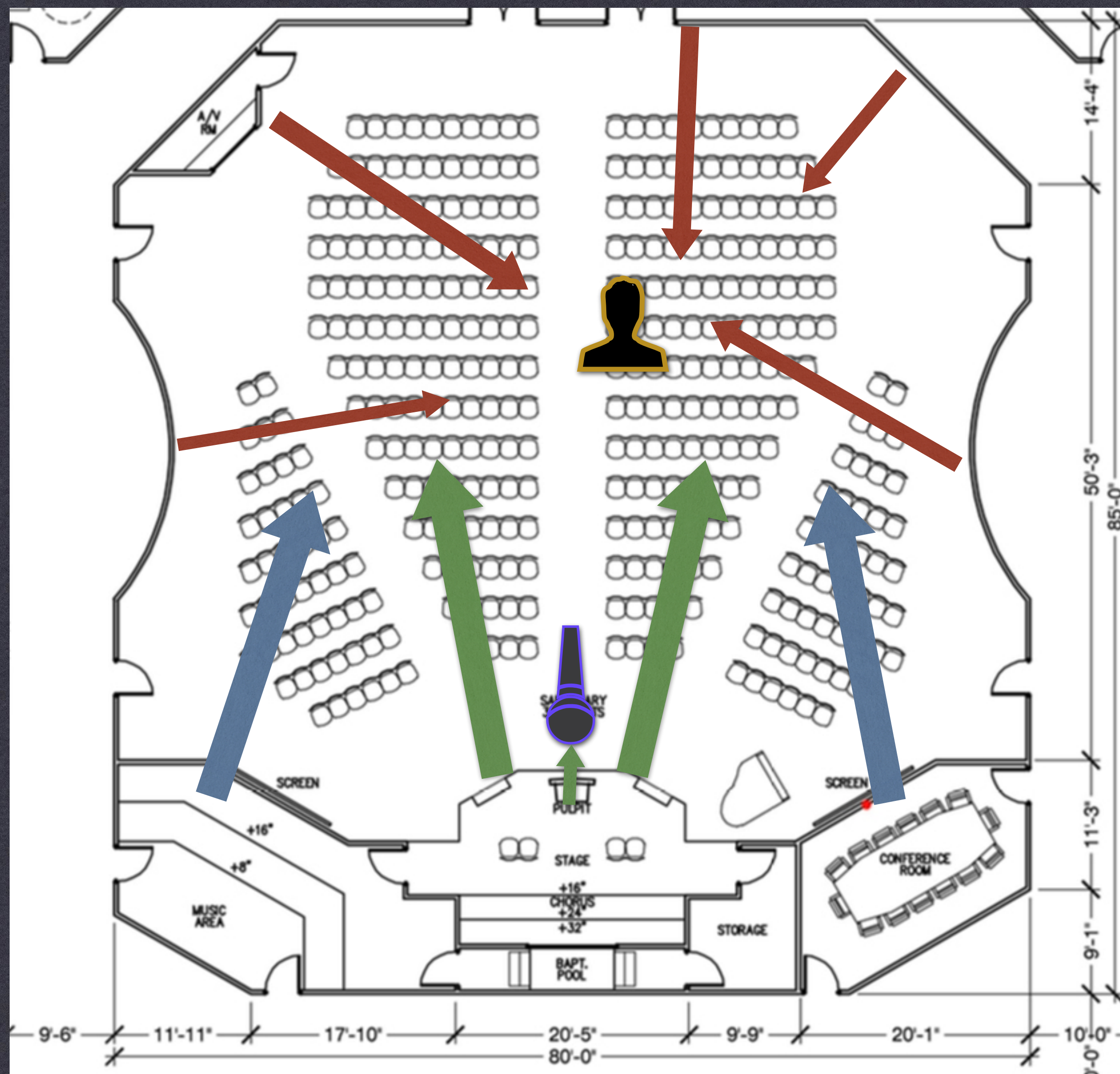


# **IMPROVING YOUR BROADCAST AUDIO**



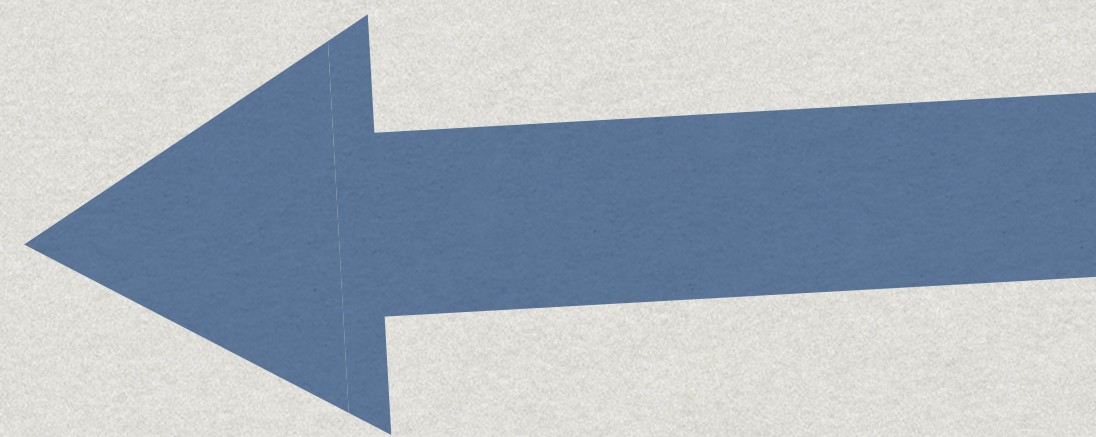


# SOUND WHEN YOU'RE SITTING IN CHURCH...

YOU HEAR SOUND FROM THREE SOURCES: 1.) NATURAL SOUND FROM STAGE. 2.) AMPLIFIED SOUND THROUGH SPEAKERS. 3.) REFLECTIONS FROM THE ROOM



When you're watching online...



You only get what comes through microphones.



# Five Steps to Improving Production Audio

1. Use a separate mix for production.



# How to Use a Separate Mix

1. 2nd Audio Board (with digital or analog split)
2. Digital Audio Workstation (Ableton Live, Avid Pro Tools, etc)
3. Sub-Mix, Matrix, or AUX from your house audio board.



# Five Steps to Improving Production Audio

1. Use a separate mix for production.
2. Get Gain Structure Right



# Get Gain Structure Right

- \* Gain is the amount of signal coming into the board on a single channel.
- \* At the source's loudest, signal should be solidly in the "orange" on the meter. (Digital = -6 db. Analog = +6 db)
- \* Avoid clipping (past the top of the meter). If the signal clips, it passes distortion all the way down the line.
- \* Adjust Gain first, then fader. If set properly, gain shouldn't change during the program.



# Five Steps to Improving Production Audio

1. Use a separate mix for production.
2. Get Gain Structure Right
3. Use Compression if available



# Use Channel Compression, if Available

- ✱ Compression reduces the difference between the loudest and the softest sounds on the channel.
- ✱ This prevents people watching at home from adjusting volume constantly.



# Five Steps to Improving Production Audio

1. Use a separate mix for production.
2. Get Gain Structure Right
3. Use Compression if available
4. Reverb & Effects



# Reverb & Effects

- \* If you have reverb, use it on any musical elements.
- \* Why? Remember, your viewer doesn't have the benefit of the room. Reverb and delay add back the room-like reflections to make sound more appealing.
- \* What if I don't have reverb effects?
  - \* Consider adding some room mics to capture some of the reflections and reverberations from your sanctuary.



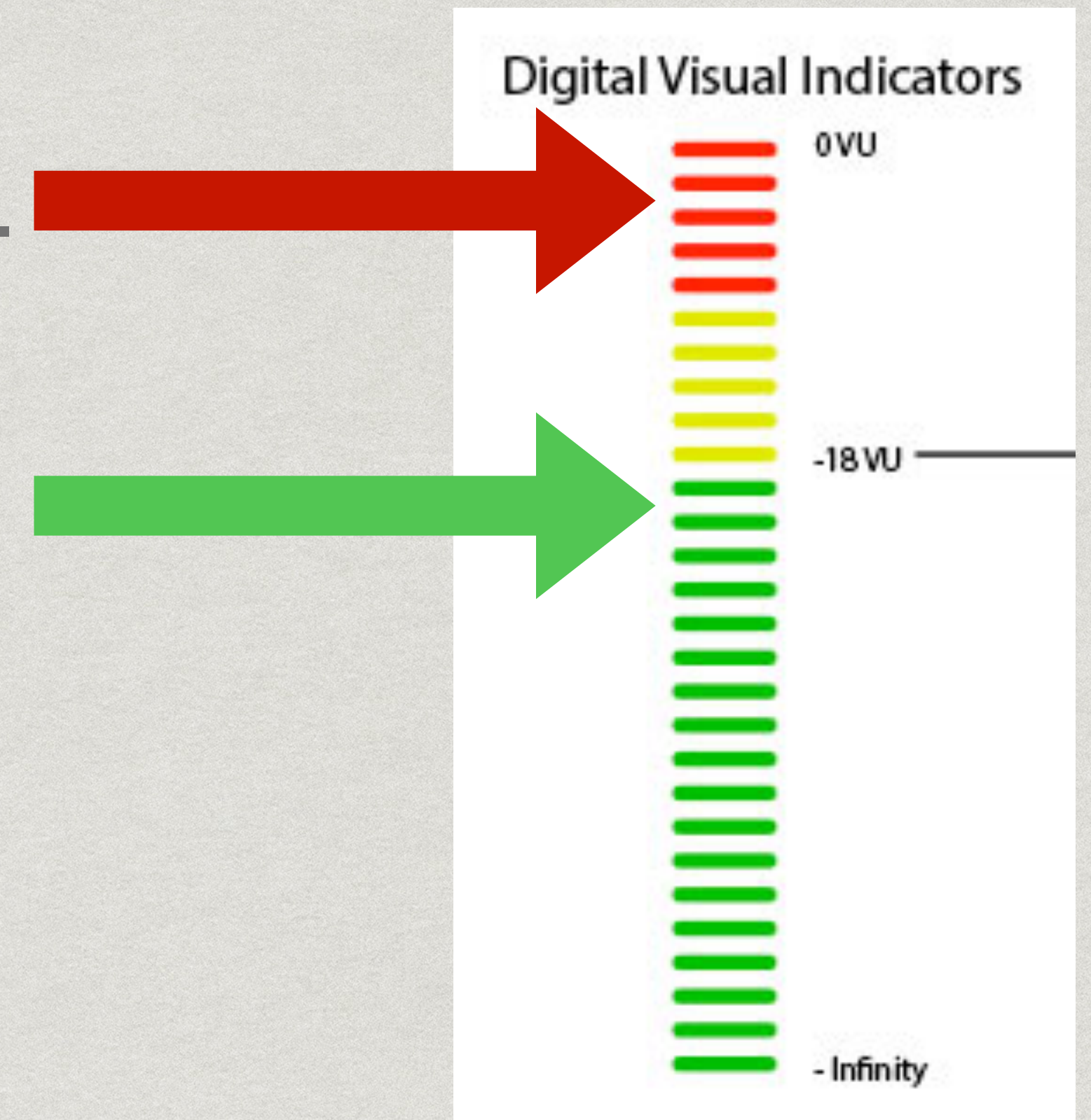
# Five Steps to Improving Production Audio

1. Use a separate mix for production.
2. Get Gain Structure Right
3. Use Compression if Available
4. Reverb & Effects
5. Maintain Good Output Volume



# Maintain Good Output Volume

- \* What's Good?
- \* Peaking just below 0 on your Video mixer meter.
- \* At the lowest, around -18.





# Five Steps to Improving Production Audio

1. Use a separate mix for production.
2. Get Gain Structure Right
3. Use Compression if Available
4. Reverb & Effects
5. Maintain Good Output Volume