

In The Blood Sound Calibration Narrative

10/22/20

6PM

- Meet and Greet in the Hansen Theatre Lobby

Go over calibration narrative, calibration plot and the expectations for the evening

6:15PM (System Check)

- Load correct system files for all equipment
- Send pink noise through each Qlab Channel through the entire system
- Load Smaart and calibrate both microphones, making sure SPL meter matches the reading from Smaart

6:35PM (Front Fill Focus & Level Set)

- I. Place Front Fill Speakers in their locations. Run appropriate cabling to each speaker
- II. Adjust focus of East FF R until -6dB variance is in the east house left isle. i.e. the fall off of the speaker is located outside of the audience. Store a trace at this position
- III. Move wireless microphone to East FF R ONAX, then increase amplifier gain until desired target level is achieved. Store trace at this position. Walk the room and verify that the -6dB coverage angle points appear to fall outside the seating area
 - IV. Repeat for East FF L. Focusing -6dB variance in the same isle.
- V. Repeat for South FF L Speaker. Focus speaker so -6dB variance occurs evenly across both opposite seating sections
- VI. Repeat for West FF Speakers. Start with West FF R. Focus this speaker into the west house right aisle. Storing traces at the appropriate times
- VII. After confirming all Front Fill speaker xfocus and level, spike locations at each speaker

7:25PM (Surround Focus & Spacing)

- I. Consult calibration plot and match each surround location to the paperwork
 - a. If horizontal location is correct, double check vertical angle by listening to the speaker in the free field. Ideal location for ONAX point is second closest row of seats.
 - b. If horizontal placement is incorrect, adjust until speaker matches the plot then continue with part a.
- II. Listen to each surround speaker in the free field, checking for anomalies in EQ

15 Minute Break

7:40PM (Stage Speakers Focus & Level Set)

- I. Place, cable and focus USL speakers as described in the calibration plot.
- II. Move wireless microphone to USL ONAX
- III. Send -18dB pink noise from smaart through USL until desired SPL level.

- IV. Store a trace
- V. Repeat with USR
- VI. Spike locations of speakers after focus and level set

8:00PM (Front Fill & Stage speakers EQ)

- I. Attach Duvetyne
- II. Place wired measurement microphone in the on axis field of East FF R.
- III. Place wireless measurement microphone at East FF R ONAX.
- IV. Send -18 dB pink noise from smaart to East FF R
- V. Take a trace of both positions
- VI. Carefully examine response curves to find trends that apply (watch coherence percentage for accuracy) and if necessary provide corrective equalization in the DSP.
- VII. Send -18 dB pink noise through East FF R after corrective EQ and store another trace
- VIII. Repeat for each FF Speaker
- IX. Repeat for onstage speakers

9:40PM (Cleanup)

- I. Remove all FF and stage speakers
 - a. Bring them back to sound storage
- II. Pack up calibration kit and store in Mallett SVC room