

# AUDIO ENGINEERING SOCIETY

## TC-Audio for Cinema Committee Meeting November 10, 2021 3 pm – 4:30 pm (GMT) via Microsoft Teams

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### Attendees

- Charles Robinson (Dolby Labs)
- Scott Norcross (Dolby Labs)
- Nuno Fonseca (Sound Particles)
- Steve LLamb (Deluxe)
- Julian Pinn (Julian Pinn Ltd) – Chair

### Agenda

1. Loudness project next steps
2. Next meeting

### Minutes

1. **Roll call**
  - Taken and reflected in Attendees above.
2. **Meeting summary**

#### **What's the problem?**

Cinema sound levels are erratic and detrimental to the industry. Responding to audience complaints of excessive loudness, exhibitors are (understandably) abandoning Reference Level and lowering the fader on cinema processors. Often customer complaints and fader settings are associated with the trailer sound levels. Policies and playback settings vary from chain-to-chain, theater-to-theater, and screen-to-screen.

#### **Why is that bad?**

Audiences are not getting a consistent presentation; they are not hearing the director's work as intended. The movie soundtrack does not correctly translate from studio to cinema. Playback of features at reduced levels diminishes impact and audience engagement. Playback at reduced levels shifts the timbre. LF and HF perception drops more quickly than MF as the fader level is lowered, resulting in a more mid-range heavy, "lo-fi" sounding mix. Playback at reduced levels shifts the spatial balance. The perception of loudness of surround sounds (which are typically at a lower level than the screen sound) drops more quickly than screen sounds as the fader level is lowered. More subtle spatial ambiances can drop below

the hearing threshold and disappear entirely. The overall effect is to shift the screen-surround balance to be more screen-heavy and less immersive.

Trailer quality itself is diminished as a result of current TASA level. The “limit” has become a “target”. The recording level leaves little headroom for dynamics, and often results in clipping.

A dissatisfied public stays home.

### **Where to start?**

The trailer audio levels need to be lower. The technology and administrative infrastructure for measuring and aligning trailer levels exists; the threshold needs to be lowered.

Despite success of TASA, trailer loudness remains the biggest issue for cinema playback level. This statement is supported by surveys of theater managers regarding their concerns, their customer complaints, and surveys of actual fader settings.

Efforts to bring features back to a consistent playback level will have limited success if the trailers continue to influence cinema processor fader settings.

Note: the trailer recording level is not the same as sound level in the auditorium; sound level is determined by recording level and fader setting. Fader setting typically reduce the playback level by more than 6dB. If the recording level were reduced, theater operators would have less need to lower the fader level.

Trailers and features would more closely and consistently correspond to the content creator’s and owner’s intent.

### Stakeholders:

- Studios (Content owners).
- Studio Marketing Dept, i.e. “trailer owners”. It has been suggested that studio marketing depts directly associate trailer level with box office revenue.
- Theater Owners / Operators: NATO, Chains
- Content creators: directors, mixers
- Advertisers / commercial content creators. (Ads often align with TASA standard)
- Manufacturers, companies and organizations, e.g. ICTA.
- Movie lovers

### Most Relevant Industry Associations:

- NATO
- TASA
- ISDCF
- SAWA, the Global Cinema Advertising Association
- SMPTE (currently avoiding cinema loudness)
- Cinema Audio Society (CAS)
- Association of Motion Picture Sound (AMPS)

### **Data**

#### Observations from surveys:

- Very few exhibitors set their faders at the reference level of 7.0 for features.
- Even fewer exhibitors set their faders at the reference level for trailers.
- Few exhibitors manually set the fader level independently for trailers (low level) and features (moderate level).
- Some control fader level using a TMS to automatically individually adjust playback level for trailers and features.
- Some use a *standard* setting for both trailers and features.
- Many chains in USA leave it to local cinema managers to determine playback level as they see fit.

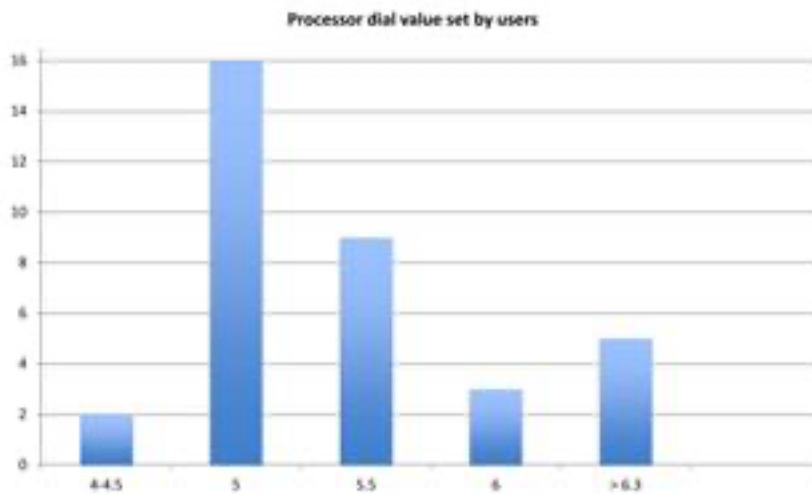
- In such cases and even when there is a stated policy, many exhibitors understandably respond to audience complaints by ratcheting down playback level until complaints (and refunds) drop to an acceptable level, and leave it there. (“May turn it back up for next *Star Wars*.”)

Results from Two Surveys

*SMPTE 25 CSS Modern Calibration AHG Theater Technicians Survey 22 June 2013*

39 Responses representing approximately 3500 screens.

**55. If known, what does the user of the facility set the playback level to for daily use after calibration has been completed at reference level?**

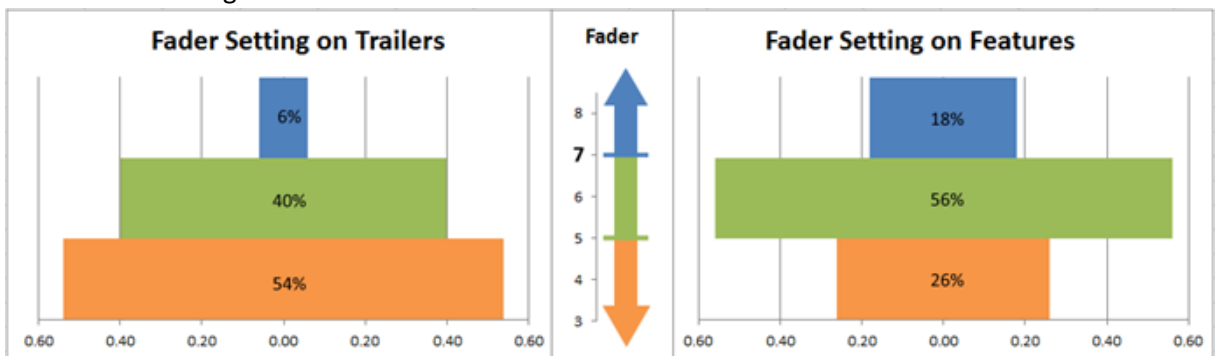


(35 responses to this question => 6%, 46%, 26%, 9%, 14%)

*Is the Cinema Sound Reference Dead?*

John Fithian, President & CEO NATO, November 2017

“A rough, anonymous survey of cinema companies, undifferentiated by size of the company, found the following results:”



Meeting summary by and with thanks to Charles Robinson