

Overview

This standard is about mastering final audio outputs to meet creative requirements. This requires the use of critical listening skills to identify fine degrees of difference in poorly mixed stereo materials, or when collapsing a stereo mix down to a mono signal.

This standard involves critically evaluating audio materials, identifying problems and repairing or adjusting audio materials to resolve them, selecting appropriate formats and mastering audio outputs in line with quality and safety requirements.

This standard is for recording engineers, editing engineers, mastering engineers, mix engineers and programmers who master final audio outputs.

Performance criteria

You must be able to:

1. set up a monitoring environment appropriate for mastering
2. carry out an aural analysis of audio outputs against agreed quality and creative requirements
3. use appropriate equipment to evaluate audio quality
4. identify tuning or pitch performances that have identifiable problems
5. identify fine degrees of difference in components of mixes that change over time
6. identify precise locations of audio outputs that have identifiable problems
7. use authorised solutions to repair audio problems and issues
8. mark up and report irresolvable audio problems and their possible causes to appropriate people
9. select appropriate formats for audio outputs
10. transfer audio materials in line with quality requirements
11. operate all equipment in line with safety requirements at all times
12. reset and tidy all equipment when work is complete

Knowledge and understanding

You need to know and understand:

1. how to set up a basic stereo A/B monitoring system
2. critical listening and aural skills and audio analysis techniques
3. the differences between mono and stereo signals and in phase and out of phase signals in the signal chain.
4. the characteristics of pieces of music from differing genres
5. recording and production techniques and instrumentation used in different genres
6. aspects of basic music theory and styles created
7. equipment to evaluate quality and how to use it including near and far field studio reference monitor speakers, professional quality headphones
8. digital codecs and the impacts of using high and low bit rate codecs
9. various common audio problems
10. permissible solutions for repairing audio problems
11. stereo issues that can or cannot be repaired
12. irresolvable audio problems
13. playback qualities of various consumer mediums
14. how to identify bad tuning or pitch performances
15. components of mixes that can change over time including frequency balance, volume balance, effects usage, dynamics effects (gating & compression)
16. how to identify track numbers of defective parts
17. the range of formats for audio outputs
18. quality and creative requirements
19. health and safety principles of safe listening including safeguards against hearing loss

Developed by ScreenSkills

Version Number 2

Date Approved 29 Mar 2020

Indicative Review Date 30 Mar 2024

Validity Current

Status Original

Originating Organisation Creative & Cultural Skills

Original URN CCSMT25

Relevant Occupations Recording Engineers, Recording Producers, Mix Engineers, Assistant Engineers, Programmers, Tape Ops, Writers, OB/Post Engineers, Editing Engineers, Mastering Engineers, Film Scorers, Pre and Post Production

Suite Sound Recording and Music Technology

Keywords Audio material; Creative requirements; Sound; Music; Sound Recording; Mastering; Music Technology;
