CCSMT11

Equalise audio material to meet creative requirements

Overview

This standard is about equalising audio material to meet creative requirements. This standard mostly applies to work in studios. It is predominantly about equalising music but can also apply to other audio and sound sources.

This standard includes consulting on requirements for equalisation, deciding if material should be equalised, balancing levels, adjusting equalisation settings, recording and reporting on equalised sections and saving and archiving files.

This standard is for recording engineers and programmers who equalise audio material to meet creative requirements.

Performance criteria

You must be able to:

1. collect information from relevant sources about requirements for equalisation
2. import material required for equalisation without causing degradation
3. check that equipment and software is set up and working as required
4. decide when to use equalisation and when to leave signals unprocessed based on own analysis of structure and tone of material and consultation with others
5. set up and check balance of levels, equalisation and dynamics meet creative requirements
6. add specified effects in appropriate places
7. balance tracks to that sound is cohesive
8. make adjustments and changes using the equalisation sections on all channels
9. make improvements to audio materials in line with creative requirements
10. make stereo recordings of each equalised section before and after equalisation work
11. complete written records of changes made to audio materials in line with industry recognised procedures
12. report details of any instrument or equipment that is suspected of being in unsafe condition, or is damaged in use, without delay
13. confirm completed work meets requirements for sign off
14. document and label files using industry-accepted labelling systems
15. save and archive files in organisational file management systems
16. tidy, reset and disconnect all equipment when work is complete

Knowledge and understanding

You need to know and understand:

1. the types, features, elements, subtractive and additive uses and functional differences of equalisation systems including parametric, semi-parametric, valve and digital (para-graphic)
2. how to connect equalisation systems
3. how to operate equalisation sections on mixing consoles, hardware units and digital audio workstation software plug ins
4. how to operate equalisation insert and connectivity with different audio signals
5. industry accepted equalisation system terminology
6. the purpose of frequency guide equalisation charts
7. common frequency ranges associated with instruments and vocals
8. how to use equalisation to solve or improve multi-track audio material
9. how to assess and report the uses of equalisation
10. how to examine the effects of equalisation on audio material
11. who to consult on creative requirements including performers, composers, managers and colleagues and how to liaise with them
12. the benefits of reference tracks when agreeing creative requirements
13. how to analyse the structure of stems and composed parts of audio material
14. types of effects and how they affect audio material including reverb, chorus, flanger, phaser, spectral
15. how to make the most of arrangements by balancing levels
16. what is required for sign off and the implications of not achieving it
17. industry standard protocols for labelling and filing

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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	CCSMT16
Relevant Occupations	Recording Engineers, Recording Producers, Mix Engineers, Assistant Engineers, Programmers, Composers, Tape Ops, Writers, Artists, OB/Post Engineers, Editing Engineers, Maintenance Engineers, Co-writers, Studio Manager
Keywords	Equalise; Audio material; Creative requirements; Sound; Music; Sound Recording: Music Technology;