CCSMT16

Operate analogue and digital equalisation for music and audio industries



Overview It is important for employees in all recording sectors to understand the basic types of equalisation and equalisation processing equipment being used. This standard is about the equalisation section of a mixing console and other external processing equipment in all types of studios.

This standard is about equalisation systems that you will use in professional studios when working with a huge variety of audio and sound sources.

You will balance audio signals and adjust equalisation. You will use listening techniques in order to evaluate effective equalisation on a wide variety of audio materials, such as a live recorded drum kit or string quartet.

This standard utilises the multi tasking skills expected of today's recording engineers and programmers.

Each task is then recorded to stereo (before/after – A/B copy) and archived as example.

Good practice and operation:

Parametric equalisers, semi-parametric equalisers, valve equalisers, digital (Para-graphic) equalisers, filters, Cut, boost, attenuate, filters, HPF, LPF, Gain, notch filters, sweep filters, bandwidth, shelving, slope, Q, EQ cut/mute switches,

This standard will expose you to industry standard equalisation systems used in all professional studios whilst working with audio signal material.

You must research and evaluate the different equalisation systems available and the reasons why or how studio recording techniques and engineering makes full use of each system fit for purpose.

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Performance criteria

You must be able to:	P1 P2 P3 P4 P5	examine equalisation (EQ) systems make connections between EQ systems and audio signals operate equalisation sections on a professional mixing consoles operate equalisation sections on professional hardware units operate equalisation sections on a professional DAW software plug ins
	P6 P7 P8 P9 P10 P11	operate EQ insert and connectivity with various audio signals communicate use of correct equalisation system terminology make informed adjustments and changes via the equalisation section on all channels produce and establish a frequency chart report details of any instrument or equipment that is suspected of being in unsafe condition, or is damaged in use, promptly as required. safely tidy, reset and disconnect all equipment

Knowledge and understanding

You need to know and understand:

- K1 the types of equalisation systems used
- K2 the features of equalisation systems
- K3 how to review software and hardware equalisation (EQ) systems
- K4 relevant equalisation system terminology
- K5 how to assess and report the uses of equalisation
- K6 how to evaluate the effects of equalisation use on various audio signals
- K7 how to examine effects of equalisation on audio material

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