Set up and dismantle professional MIDI equipment and audio equipment (hardware/software devices)



Overview

One of the main techniques and skills available to Recording Engineers and MIDI programmers is to include live recorded parts alongside any sequenced materials.

This standard utilises the multi tasking skills expected of today's recording engineers and programmers. This standard demonstrates the ability to combine original audio and MIDI parts within an audio/MIDI software sequencing package.

You will be aware of the relevant connectivity and of the differences in the overall feel and quality of live audio and MIDI-sequenced parts. You are expected to use both audio and MIDI materials.

It is a vital skill that you fully understand how to 'lock' and synchronise professional audio and DAW equipment together via standard connectivity.

This standard builds on other standards covering Recording Skills and MIDI Sequencing & Software to develop pieces of sound/music which combine both MIDI and Audio materials.

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Performance criteria

You must be able to:

- P1 make connections between pieces of MIDI hardware equipment
- P2 configure a DAW MIDI sequencer to accept and transmit MIDI instructions
- P3 configure a DAW MIDI sequencer to produce MIDI software instrument choices/presets sounds
- P4 configure audio connections between MIDI sound sources and audio monitoring facilities
- P5 set up different recording scenarios and monitor signals
- P6 connect a variety of recording equipment and monitor foldback
- P7 connect multiple MIDI devices
- P8 set up full synchronisation lock up- MTC/SMPTE/Wordclock/MADI/ AES/TDIFF/ etc
- P9 make observed adjustments during the recording whilst monitoring the material under observation
- P10 review the recorded signal levels of audio material
- P11 balance the discrete recorded tracks to improve the clarity of all playback levels
- P12 safely operate machinery, menus and parameters to store recordings
- P13 use instruments, technology or equipment effectively
- P14 use equipment and/or instruments that are appropriate to the physical environment and context of the work
- P15 identify and analyse the operational capabilities and limitations of equipment/technology for their possible use in developing creative work
- P16 select equipment and/or instruments that will be required to produce or perform any genre music/audio recording
- P17 use equipment and/or technology effectively to initiate, develop and express ideas where appropriate
- P18 set up equipment and/or instruments correctly to produce the required sounds
- P19 maintain condition of instruments and equipment to ensure effective use
- P20 make effective and appropriate use of available technical support systems and equipment as required
- P21 identify and gain opportunities to upgrade skills for using new technology
- P22 monitor and use equipment within safe practice requirements
- P23 check condition of equipment routinely to comply with H&S
- P24 identify faults in equipment and establish appropriate sources of repair and maintenance as required
- P25 report details of any instrument or equipment that is suspected of being in unsafe condition, or is damaged in use, promptly as required
- P26 produce test recordings and listen/monitor
- P27 produce equipment/audio used on recall sheets

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P28 reset and tidy all recording equipment after use

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Knowledge and understanding

You need to know and understand:

- K1 different recording scenarios and approaches
- K2 all connections for the recording scenario
- K3 how to access sources of information on basic analogue connectivity
- K4 relevant terminology and definitions for digital systems and network control
- K5 cues and their relationship to control networks
- K6 the principles of analogue forms of control and switching, versus digital control and networks
- K7 data communications, error corrections, data interfacing, and interfacing MIDI Audio devices with various common computer operating systems
- K8 basic principles of MIDI/Audio transmission, limitations, latency (processing time) and typical network/IT/Device performance
- K9 MIDI, MTC, SMPTE and show-based protocols and control mediums
- K10 control wiring and audio routing options for a typical synchronised audio control system
- K11 signal monitoring and foldback relationships
- K12 the process of monitoring signal chains for performance
- K13 which equipment/audio is used on recall sheets

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Relevant occupations	Recording Engineers; recording Producers; mix engineers; assistant engineers; programmers; composers; writers; artists; tape ops;
Suite	Music Technology
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