
MUSIC TECHNOLOGY (SOUND ENGINEERING) SUMM ER INDEPENDENT LEARNING

YEAR 12-13



TOPIC 1 - LIVE SOUND RETRIEVAL

- **Explain the following terms and how they relate to live sound;**
- function of multi-speaker arrays, e.g. 2 way, 3 way
- array design, e.g. ground stacks, flown line array
- dynamic drivers
- horn loading
- Impedance
- output wattage (root mean square (RMS)/peak)
- active and passive.





TOPIC 1 - LIVE SOUND RETRIEVAL

- **Explain the following;**
- Power amplifiers
- output wattage (RMS/peak)
- Impedance
- digital and solid state designs.

LIVE SOUND SYSTEM DESIGN FOR STADIUMS

[https://www.youtube.com
/watch?v=tjUKD4tuFMc](https://www.youtube.com/watch?v=tjUKD4tuFMc)



Foto: Ralph Larmann

TOPIC 1 - LIVE SOUND PRACTICAL PREPARATION



Why is it important perform a soundcheck at a concert? Write all the reasons you can think of.



What are some of the health and safety concerns regarding setting up live sound? Write a list of all the things that could potentially go wrong.



Why do you think it is important to carry out a risk assessment when planning a live sound set up?

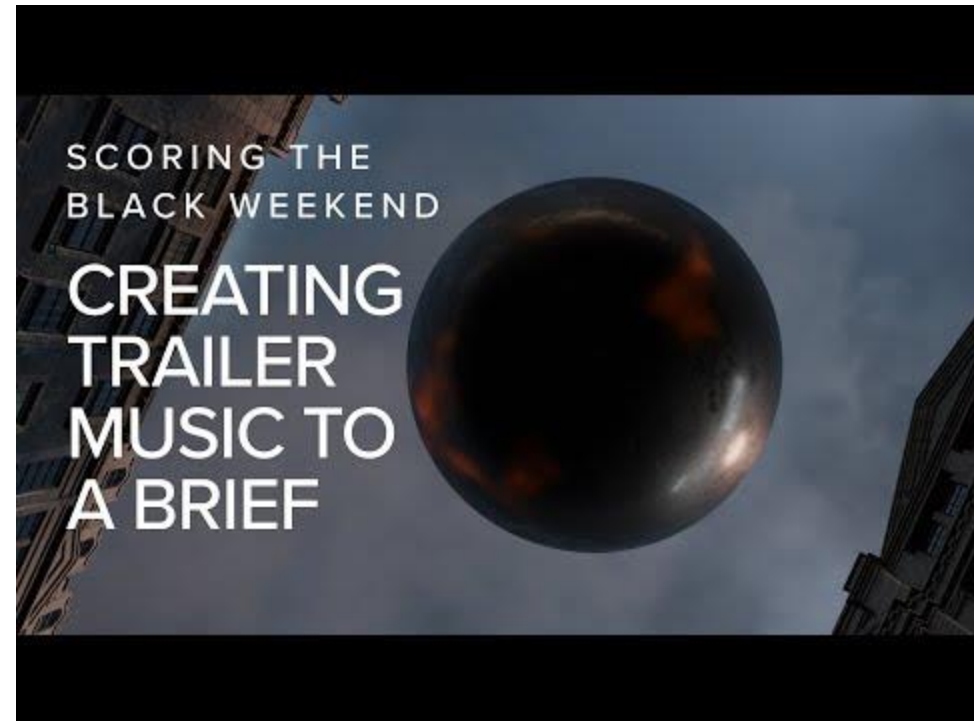
TOPIC 2 – DAW PRODUCTION PREPARATION

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- What is the Nyquist Theorem? Explain and include your own drawing to represent the theory.
 - What can altering the bit depth/sample rate change on a project?
 - Explain 'Step Input'.

DAW PRODUCTION TASK 2 - CREATING AND PRODUCING MUSIC TO A BRIEF VIDEO

Watch the video and make notes on any useful processes seen in the video.

https://www.youtube.com/watch?v=SWFEig6ls_0&t=1202s





DAW PRODUCTION TASK 3 – THEORY

- What is the difference between a major and minor chord?
- What notes do you need to play the following chords? C major, A minor, F major, G major?
- Write out a C major scale – what notes do you need?
- What is a key?
- Imagine you have been asked to write a piece of music for a horror movie. Would you use a major or minor key?
- Challenge:
 - Write out the keys and chords of G minor, Eb major and A major.
 - What purpose does a bass line have in a DAW production?

DAW PRODUCTION TASK 4 - READING

- Follow the link below to 'The MIDI Manual'. Read pages 1-12. (Chapter 1 – What is MIDI?). This has some great explanations of things and will really help with your understanding of how MIDI works for the DAW unit.
- Summarise the text by making notes in class notebook so you can access it and revise from it next year.
- https://www.google.co.uk/books/edition/The_MIDI_Manual/ZTWv1fAMm6MC?hl=en&gbpv=1&dq=working+with+midi&printsec=frontcover



TOPIC 3 - UNIT 18 WORKING AND DEVELOPING AS A PRODUCTION TEAM PREPARATION

- When you are producing an album, quite often you can come across various roles throughout the process. Please explain what responsibilities the following roles have in the creation of an album:
- Producer
- Session musician
- Mix engineer
- Arranger
- Composer
- Challenge: What are the positives and negatives of working within these roles?