
MUSIC TECHNOLOGY
(SOUND
ENGINEERING) SUMMER
INDEPENDENT LEARNING

YEAR 12-13



TOPIC 1 - LIVE SOUND PREPARATION/RESEARCH

- **Research and 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 PREPARATION /RESEARCH

- **Continue your research and explanation on the following;**
- Power amplifiers - how to choose appropriate power amplifiers for a live sound system:
- output wattage (RMS/peak)
- Impedance
- digital and solid state designs.

- **Explain what you would expect each one of these roles to be responsible for. Make sure you do this in class notebook.**
- •FOH engineer.
- •Monitor engineer.
- •Backline technician.
- •Road manager.
- •Roadie.
- •Stage manager.

TOPIC1- LIVE SOUND PREPARATION /RESEARCH

LIVE SOUND SYSTEM DESIGN FOR STADIUMS

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



TOPIC 1 - LIVE SOUND PREPARATION/RESEARCH



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?

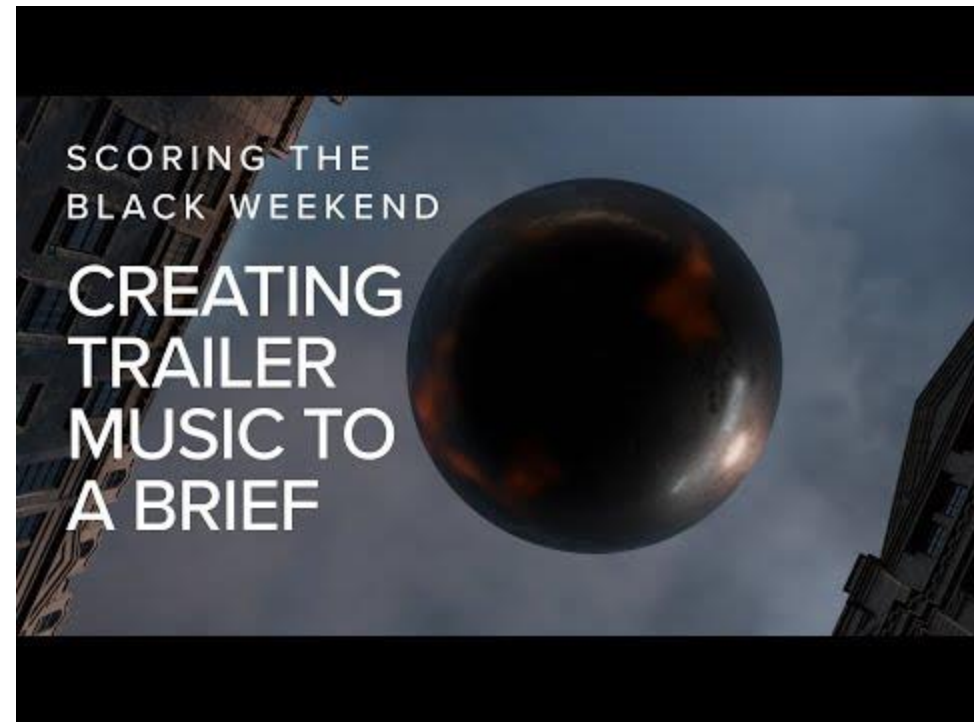
TOPIC 2 - DAW PRODUCTION PREPARATION

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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'.

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



ADDITIONAL RECOMMENDED CONTENT

- 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