Module Definition Form (MDF)

Module code: MOD007365	**Version:** 2 **Date Amended:** 22/Jan/2025

1. Module Title
Live Sound

2a. Module Leader
Tim Webster

2b. School
Cambridge School of the Creative Industries

2c. Faculty
Faculty of Arts, Humanities, Education and Social Sciences

3a. Level
4

3b. Module Type
Standard (fine graded)

4a. Credits
30

4b. Study Hours
300

5. Restrictions

Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:	BSc (Hons) Audio & Music Technology; BSc (Hons) Audio & Music Technology (with placement); appropriate framework award,		

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

There will always be a demand for live sound engineering for both acoustic and electronic music. This module introduces you to the principles and practice of sound engineering in live situations. In many cases this differs substantially from that in recording studios. The module starts by introducing the key principles behind electrical safety and hearing protection, which are of great importance to the engineers, audience, artists and venue staff. It then looks at the audio hardware involved, including mixers, amplifiers and crossovers. The various electrical connections and connector types are explained. The importance of stage monitoring is examined. You will also learn the principles of lighting controllers and visuals, and the technologies used. The principles of Audio over Ethernet are introduced. The overall PA system is considered both in terms of an ideal design and the practicalities of running a non-ideal system successfully. The system configurations in several different venues are compared. The management of a system in a live environment is demonstrated through practical sessions in various venues. This will include consideration of how to deal effectively with artists, promoters and venue staff.

6b. Outline Content

- Electrical principles of PA and sound reinforcement
- Balanced and unbalanced analogue audio signal connections
- Soldering techniques
- Audio over Ethernet
- Audio amplifiers, crossovers, mixers, loudspeakers, stage monitors and power delivery
- Electrical and audio safety issues associated with live sound, legal requirements
- Lighting and visuals
- PA system management
- Loudspeaker types, systems, and deployment

6c. Key Texts/Literature

The reading list to support this module is available at: https://readinglists.aru.ac.uk/

6d. Specialist Learning Resources

Audio and Music Technology studios.

Access to the Recital Hall (HEL029) and Cambridge Junction and, where appropriate, external venues.

7. Learning Outcomes (threshold standards)		
No.	**Type**	**On successful completion of this module the student will be expected to be able to:**
1	Knowledge and Understanding	Understand the electrical and acoustic principles involved for live sound reproduction;
2	Knowledge and Understanding	Understand the principles of audio amplification and power delivery and analyse and diagnose system faults;
3	Knowledge and Understanding	Understand the electrical and audio safety issues and legal requirements associated with live sound reinforcement systems;
4	Intellectual, practical, affective and transferrable skills	Develop practical skills in the assembly and operation of a live PA including the ability to analyse and alter the PA or acoustic performance space.

8a. Module Occurrence to which this MDF Refers				
Year	**Occurrence**	**Period**	**Location**	**Mode of Delivery**
2025/6	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	**Hours**	**Learning Outcomes**	**Details of Duration, frequency and other comments**
Lectures	10	4	1 hour lecture/demonstration in Weeks 1-6 and 8-11
Other teacher managed learning	39	1-4	3 hour tutorial or practical in a live venue in Weeks 1-6 and 8-11. Times will vary between weeks 2 hour reading session in Week 7 2 hour feedback session in Week 7 2 hour revision session in Week 12
Student managed learning	254	1-4	Experiments, coursework and revision
TOTAL:	303		

9. Assessment for the above Module Occurrence					
Assessment No.	**Assessment Method**	**Learning Outcomes**	**Weighting (%)**	**Fine Grade or Pass/Fail**	**Qualifying Mark (%)**
010	Coursework	1-4	50 (%)	Fine Grade	30 (%)
3,000 word equivalent					
Assessment No.	**Assessment Method**	**Learning Outcomes**	**Weighting (%)**	**Fine Grade or Pass/Fail**	**Qualifying Mark (%)**
011	Coursework	1-4	50 (%)	Fine Grade	30 (%)
Open-book, online test/quiz administered on Canvas 2 hours					

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7*).

In addition, students are required to:
(a) achieve the qualifying mark for each element of fine graded assessment as specified above
(b) pass any pass/fail elements

[* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]