

# Unit 8: Concert Production and Staging

<b>Unit code:</b>	<b>R/600/6933</b>
<b>QCF Level 3:</b>	<b>BTEC National</b>
<b>Credit value:</b>	<b>10</b>
<b>Guided learning hours:</b>	<b>60</b>

## ● Aim and purpose

The aim of this unit is to enable learners to develop the skills required to set up staging and sound for concert performances safely, whilst taking into account relevant legal and safety considerations.

## ● Unit introduction

The staging of music events is vital to the entertainment industry. The principles involved are the same for very large and very small events. Practitioners in this area are generally highly-skilled specialists who possess a working knowledge of all areas of the business. This unit aims to introduce learners to the broad spectrum of roles in the area of sound, necessary for successful concert production and staging. It is concerned with organisation and management, technical requirements, set-up and rigging and the health and safety legislation and issues surrounding this area of the industry.

Whilst allowing for specialism, the unit will focus strongly on safety, backline, stage and sound system components, interconnection and operation in music performance. Learners will investigate organisational and managerial roles within event production teams and look at methods for safe handling, rigging and setting up of staging and equipment. It is anticipated that opportunities for practical work and assessment will be built around other learners' performances and that the performers and 'crew' will work as an effective team.

On completion of this unit, learners should be able to safely establish power supplies for sound equipment, set up basic backline, monitoring and sound systems and operate them. Learners should understand safe procedures for handling, rigging and staging and be able to function in a team alongside musicians and other performers. They will also be familiar with the management and organisational roles involved with concert production and have an awareness of safe practice and essential health and safety legislation.

Whilst this is designed as a music technology unit, it is possible that learners following a performance programme may opt for this unit as an alternative to performing and would benefit from other more technical units (such as *Live Sound Techniques*) to further pursue this direction.

## ● Learning outcomes

### On completion of this unit a learner should:

- 1 Be able to safely establish appropriate electrical power to concert systems
- 2 Be able to safely set up and rig sound for concert performance
- 3 Be able to set up staging and backline systems for concert performance
- 4 Know the key organisational roles and responsibilities and legal considerations involved in concert performance.

# Unit content

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## 1 Be able to safely establish appropriate electrical power to concert systems

*Basic electrical safety:* correct voltage; fuses and protection devices; earth connections; load; power ratings and current; health and safety legislation; safe practice; visual checks; PAT testing

*Power connections:* connector types for different equipment and voltages; distribution; dimmer equipment; technical power; single and three phase supply; safety considerations

## 2 Be able to safely set up and rig sound for concert performance

*Sound systems:* safe handling and installation of equipment; cabinet types and safe connection; safe rigging procedures for sound systems; monitor systems eg in-ear monitor systems; amplifiers; connector types for microphone/line and speaker connections; cable types and care; radio systems; balanced and unbalanced connections; multi-core cables; stage-boxes; processing equipment; mixing desks; power requirements and connections

## 3 Be able to set up stage and backline systems for concert performance

*Set up stage:* types of staging; steel deck; proprietary systems; approaches to concert staging; layout for different performance types eg access, risers, security, masking backdrops, projection screens; basic rigging for scenic items; microphones eg microphone stands, cabling; monitor positioning; safe practice

*Backline:* eg setting up drum kits, setting up guitar systems, bass systems, keyboard systems, radio systems, connection to PA systems, sub-mixing

## 4 Know the key organisational roles and responsibilities and legal considerations involved in concert performance

*Organisational roles and responsibilities:* eg event management, stage management, FOH roles, stage crew, production management, crowd management, tour and transport management, international transport regulations

*Legal framework:* eg rigging safety, working at height, PPE, manual handling, licensing, door supervision, health and safety legislation, accessibility, DDA amendments

## Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
<b>P1</b> establish safe and appropriate electrical power to concert systems competently with some assistance [TW]	<b>M1</b> establish safe and appropriate electrical power to concert systems competently with only occasional assistance	<b>D1</b> establish safe and appropriate electrical power to concert systems competently and independently, to near professional expectations
<b>P2</b> set up and rig sound for a concert performance safely and competently using supplied equipment and connectors [SM]	<b>M2</b> set up and rig sound for a concert performance safely and competently selecting appropriate equipment and connectors	<b>D2</b> set up and rig sound systems for a concert performance in a safe manner competently, independently to near professional expectations
<b>P3</b> set up staging and backline for a concert performance safely and competently using supplied equipment [EP]	<b>M3</b> set up staging and backline for a concert performance safely and competently selecting appropriate equipment	<b>D3</b> set up staging and backline systems for concert performance in a safe manner competently, independently to near professional expectations
<b>P4</b> identify the key organisational and legal considerations involved in concert performance. [IE]	<b>M4</b> describe the key organisational and legal considerations involved in concert performance.	<b>D4</b> explain the key organisational and legal considerations involved in concert performance.

**PLTS:** This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

<b>Key</b>	IE – independent enquirers	RL – reflective learners	SM – self-managers
	CT – creative thinkers	TW – team workers	EP – effective participators

## Essential guidance for tutors

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### Delivery

This should be a very practical unit. It is essential that safe practice is emphasised and monitored throughout the delivery and assessment processes. Learners should be introduced to the health and safety legislation surrounding manual handling, rigging, electrical safety and other aspects of event set-up, organisation and management at an early stage, and this focus should be maintained at all times.

P1 involves identifying and establishing safe and appropriate electrical supply for sound, lighting and (where appropriate) projection systems for live music performance. Learners will need to understand how to safely establish the correct type of power for a range of systems. This should be achieved by instruction, discussion and demonstration before any practical work is undertaken.

A similar approach should be taken to delivery of P2 and P3. These involve the creation of the 'stage' and the installation, set-up and operation of lighting, sound and video projection systems as well as backline and monitoring systems. Learners should be given the opportunity to develop a wide range of knowledge and skills to allow them to function in a variety of performance support roles – although they may wish to develop a degree of specialisation as the unit progresses.

P4, which focuses upon event organisation, management and the associated legislation, could be delivered alongside the practical elements of the unit and will involve some tutor delivery, discussion and research on the part of learners. The practical nature of the unit should give a context to this work and avoid the subject matter from feeling overly theoretical.

It would be helpful if the delivery of the unit could be based around 'real' performances – once the learners have a firm grasp of safe working practices – perhaps with a range of opportunities for each learner to function in a range of different roles.

## Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit and structure of the programme of learning.
Whole class sessions covering components, and the safe application of electrical power.
<b>Assignment 1: Got the Power? – P1, M1, D1</b> <ul style="list-style-type: none"><li>• Individual and class sessions – example and methods.</li><li>• Research and preparation/practical sessions.</li><li>• Assessment feedback, review and further opportunities for assessment identified.</li></ul>
Whole class sessions covering the setting up and rigging of systems.
<b>Assignment 2: Rigging the PA – P2, M2, D2</b> <ul style="list-style-type: none"><li>• Individual and team practical preparation.</li><li>• Assessed practical activities.</li><li>• Assessment feedback, review and further opportunities for assessment identified.</li></ul>
Whole class sessions covering staging and backline.
<b>Assignment 3: Staging and Backline – P3, M3, D3</b> <ul style="list-style-type: none"><li>• Individual and team preparation.</li><li>• Assessed practical activities.</li><li>• Assessment feedback, review and further opportunities for assessment identified.</li></ul>
Whole class sessions covering roles and commercial practice.
<b>Assignment 4: A Legal Performance? – P4, M4, D4</b> <ul style="list-style-type: none"><li>• Class lecture and discussions.</li><li>• Collating evidence, report writing.</li><li>• Assessment feedback, review and further opportunities for assessment identified.</li></ul>

## Assessment

It is unlikely that all of the evidence required by this unit will be generated by a single event. Each learner is required to demonstrate a range of knowledge and skills at a basic level. The merit and distinction criteria for the practical elements of the unit require a degree of focus and specialisation in a particular area. For learners aiming to meet the merit and distinction criteria, the level of autonomy involved will be the deciding factor. The content of this unit is likely to be new to learners and significant amounts of instruction will be required to begin with as they become familiar with new information.

The underpinning knowledge required for P1 can be assessed through questioning, observation or, to a certain extent, by testing. Evidence could also take the form of a written report or presentation demonstrating learners' understanding of the concepts and practice involved. Learners should be given the opportunity to demonstrate safe practice – this could be assessed by tutor observation or witness statement from an appropriate competent person, or A/V evidence. Questioning could also be used in assessing M1 where learners explain their solution or go further in securing their knowledge within a justification for the choices made.

Learners addressing P1 will do so safely with some assistance from a tutor or technician. At merit level the learner will complete the process having needed only occasional assistance. At distinction level the learner will have completed all specified tasks competently to near professional standards and with total independence.

Evidence for P2 and P3 can be generated by A/V evidence, supported by tutor observation of a range of practical tasks – documented by witness statement. Opportunities for peer assessment should also exist given the nature of the unit and the emphasis on group work. Learners could also provide evidence in the form of a reflective journal or presentation demonstrating their understanding of processes and principles. Again learners successfully addressing pass criteria will be working competently but with some assistance. To attain a merit learners will work needing only occasional assistance, and at distinction will work independently to near professional expectations. For M2 and M3, learners select equipment from a supply which satisfies the task in hand where for D2 and D3 they will be able to identify the equipment beforehand and explain their choices.

P4 could have a practical assessment element based around an event or a series of events. Evidence demonstrating learners' understanding of legislation and standard professional practices could be generated in several ways – through discussion, testing, written work or presentation.

Learners who successfully address P4 will have for example provided a complete list of organisational and legal considerations with points but little detail or amplification. For M4, learners will in addition include relevant and specific details to amplify, inform and guide. For D4, there will in addition be some analysis, with proof that the learner does have knowledge of the areas in question

## Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1 M1 D1	Got the Power?	Brief give a demonstration of safe methods to class.  May include Health and Safety test.	Demonstration in class.  Evidence may include: <ul style="list-style-type: none"> <li>• presentation</li> <li>• demonstration</li> <li>• A/V evidence</li> <li>• test paper.</li> </ul>
P2 M2 D2	Rigging the PA	Workshop or performance venue activities rigging and de-rigging complete PA sound systems.	Practical workshops.  Evidence may include: <ul style="list-style-type: none"> <li>• A/V evidence</li> <li>• tutor observation</li> <li>• written report/diary.</li> </ul>
P3 M3 D3	Staging and Backline	Workshop or stage based activities setting up staging and on-stage (backline) equipment.	Practical workshops.  Evidence may include: <ul style="list-style-type: none"> <li>• A/V evidence</li> <li>• tutor observation</li> <li>• report or diary.</li> </ul>
P4 M4 D4	A Legal Performance?	Brief to write a piece for publication which covers the organisational roles and responsibilities including legal considerations of a given performance event.	Magazine article.  Evidence may include: <ul style="list-style-type: none"> <li>• written piece</li> <li>• presentation</li> <li>• specimen contracts and agreements.</li> </ul>

## Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Music and Music Technology sector suite. This unit has particular links with the following unit titles in the BTEC Music and Music Technology suite:

Level 1	Level 2	Level 3
		Music Performance Techniques
		Live Sound Techniques
		Music Project
		Major Music Project

This unit also has links with the following National Occupational Standards:

### Technical Theatre

- CPD1 – Improving your skills
- CPD2b – Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 – Working safely
- CPD4a – Contributing to technical production work for performance
- CPD4b – Overseeing technical production work for performance
- HS2 – Assessing risks (HSS6)
- HS5 – Controlling risks (ENTO HSS2)
- HS3b – Selecting and using safe systems for working at height (RC3)
- TP3.6a – Contribute to the planning of sound requirements for a production (C2)
- TP3.6b – Planning sound requirements for a production (C2)
- TP8.4 – Setting up and checking sound equipment (C6)
- TP14.1a – Getting in, fitting up and getting out (M4)
- TP20.4b – Supervising sound operation for a live performance in the theatre
- TP23.1 – Maintaining buildings or equipment (C12)
- TP5.6 – Sourcing sound equipment
- MTP2 – Cleaning up own work area.

### Essential resources

Appropriate venues for music performance can take a variety of forms. Staging, sound and lighting systems need not be large-scale – the main focus of the unit is safe practice and an understanding of the issues and procedures involved in concert production and staging. At a basic level, learners should have access to sufficient resources to allow them to take a practical approach to their learning and to develop their understanding and skills in an appropriate context.

## Indicative reading for learners

### Textbooks

Davis G and Jones R – *The Sound Reinforcement Handbook* (Hal Leonard, 1990) ISBN 0-88188-900-820

Higgs C – *An Introduction to Rigging in the Entertainment Industry (Applications & Techniques Series)* (Entertainment Technology Press, 2002) ISBN 9781904031123

Vasey J – *Concert Sound and Lighting Systems* (Focal Press, 1999) ISBN 0080502741

White P – *Basic Live Sound* (Sanctuary Publishing Ltd, 2000) ISBN 1860742661

### Periodicals

*Audiomedia* magazine ([www.audiomedia.com](http://www.audiomedia.com))

*Live Sound International* magazine ([www.livesoundint.com](http://www.livesoundint.com))

*Pro Sound News* magazine ([www.prosoundeurope.com](http://www.prosoundeurope.com))

*Resolution* magazine

*Sound on Sound* magazine (SOS Publications Group)

### CD ROM

Moulton D – *Golden Ears* (KIQ Productions) CD-based ear training – [www.KIQproductions.com](http://www.KIQproductions.com)

## Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Independent enquirers	researching health and safety information
Reflective learners	responding to feedback
Team workers	working in group PA rigging exercises
Self-managers	achieving independence in practical activities
Effective participators	rigging/lifting in teams.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	researching approaches to concert staging
Self-managers	ensuring deadlines are met.

## ● Functional Skills – Level 2

Skill	When learners are ...
<b>ICT – Use ICT systems</b>	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	creating magazine articles
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	creating magazine articles
Manage information storage to enable efficient retrieval	saving and opening written pieces
<b>ICT – Develop, present and communicate information</b>	
Present information in ways that are fit for purpose and audience	using ITC to create magazine articles
<b>English</b>	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	discussing the running of a marketing campaign
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	exploring marketing materials used by music organisations
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	producing copy for marketing materials.