

HNC Sound Production OR HNC Technical Theatre Sound For Live Events - J01C 34

ASSESSMENT BRIEFS LO's 1,2,3

STUDENT COPY

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University of the
Highlands and Islands
Perth College

General information for students:

Unit Title : Sound For Live Events

Unit Code : J01C 34

Learning Outcomes:

On successful completion of the Unit you will be able to:

- 1 Prepare for a Live event
- 2 Assemble, Test, fault-find and sound check a sound reinforcement system
- 3 Operate a sound reinforcement system for a live sound event

Assessment	Outcome Covered	Evidence
Planning documentation in response to a Brief	LO 1	Completed Product / Portfolio
Practical Assignment	LO 2 (2 part practical) LO 3	Assessor observation Check list

LO1: Prepare for a live Event

Outcome covered: 1

Assessment instructions

In order to successfully complete this assessment, you will interpret the specific requirements for providing and operating a sound reinforcement system for an event in response to a brief provided by your lecturer.

Based on the brief, you will need to correctly specify an appropriate sound reinforcement system to meet the needs of the venue and the performer. You should demonstrate this through preparing and submitting the following documentation:

Only 1 of the following Briefs to be completed (assessor to designate)

STUDENT BRIEF 1: Live sound requirements - Band performing in Goodlyburn theatre with seats removed

You have been hired to provide a sound reinforcement system and live sound engineering services for the band.

The band's manager has booked the venue and provided the following information:

Venue Details: GB theatre is a general-purpose receiving house, Capacity 200.

There is a Single 32 Amp supply, position of which should be confirmed at site visit. For this event the upper balcony area is not used.

The mixing position should be at the rear of the hall, central position.

Band Details: The Band are a six-piece band with three vocals, consisting of a 4-piece drum kit (kick drum, snare drum, rack tom and floor tom), electric bass guitar, acoustic guitar, electric guitar and keyboard. Lead vocals are provided by the acoustic guitarist, with one other vocalist and the keyboard player providing backing vocals. The vocal mics are to be wireless.

The band will provide their own drums and backline: a 4x10 bass amp combo and a 1x12 guitar amp. The acoustic guitar and keyboards (stereo) require DI boxes. The electric guitarist has a pedal board which requires power.

The manager has not provided a stage plot or channel list but has informed you that the electric guitar and keyboard are stage right, the bass and backing vocalist are stage left, and drum kit and acoustic guitar / main vocal are upstage and downstage centre respectively. He has also indicated that the band have requested four stage monitors (drum kit, keyboard, vocals and backing vocals) and would prefer four separate monitor mixes but are happy to make do with a minimum of two.

Routing of all cables should avoid impeding Fire escapes and audience ingress / egress routes.

STUDENT BRIEF 2: Live sound requirements - Band performing in the Goodlyburn theatre with seats in place

You have been hired to provide a sound reinforcement system and live sound engineering services for the band.

The band's manager has booked the venue and provided the following information:

Venue Details: Goodlyburn theatre is a general-purpose receiving house, Capacity seated.

There is a Single 32 Amp supply, position of which should be confirmed by a site visit. There is also power in the control are on the same phase

For this event the upper balcony area is used. The mixing position is to be in the control room at the rear of the balcony.

Band details: The Band are a 5 piece, with 2 vocals, small drum kit (Kick, Snare, HH and percussion) Upright bass, 1 x acoustic guitar, Fiddle, Accordion and Bodhran).

The manager has not provided a stage plot or channel list but has informed you that Vocals / Acoustic Guitar is downstage centre stage with bass at stage right, and Fiddle and accordion stage left, Drums/Bodhran upstage centre. The Manager has also indicated that the band have requested four stage monitors (drum kit, keyboard, vocals and backing vocals) and would prefer four separate monitor mixes. The band are bringing no Backline other than drum kit.

STUDENT BRIEF 3: Band performing in Goodlyburn theatre with seats removed

You have been hired to provide a sound reinforcement system and live sound engineering services for the band.

The band's manager has booked the venue and provided the following information:

Venue Details: Perth College students association is a general-purpose hall, Capacity 300,

There are Single 13 Amp supplies available, positions of which should be confirmed during a site visit. The mixing position is to be at FOH approximately 15m from stage.

Band Details: The Band are a six-piece band with three vocals, consisting of a 4-piece drum kit (kick drum, snare drum, rack tom and floor tom), electric bass guitar, acoustic guitar, electric guitar and keyboard. Lead vocals are provided by the acoustic guitarist, with one other vocalist and the keyboard player providing backing vocals.

The band will provide their own drums and backline: a 4x10 bass amp combo and a 1x12 guitar amp. The acoustic guitar and keyboards (stereo) require DI boxes. The electric guitarist has a pedal board which requires power.

The manager has not provided a stage plan or channel list but has informed you that the electric guitar and keyboard are stage right, while the bass and backing vocalist are stage left, with drum kit and acoustic guitar in the centre. He has also indicated that the band have requested four stage monitors (drum kit, keyboard, vocals and backing vocals) and would prefer four separate monitor mixes but are happy to make do with a minimum of two.

Routing of all cables should avoid impeding Fire escapes and audience ingress / egress routes.

STUDENT BRIEF 4: Live sound requirements - Band performing in the Goodlyburn theatre with seats in place

You have been hired to provide a sound reinforcement system and live sound engineering services for the band.

The band's manager has booked the venue and provided the following information:

Venue Details: Perth College students association is a general-purpose hall, Capacity 300, There are Single 13 Amp supplies at stage left and right, positions of which should be confirmed by site visit. The mixing position is to be at FOH approximately 15m from stage.

Band details: The Band are a 5 piece, with 2 vocals, small drum kit (Kick, Snare, HH and percussion) Upright bass, 1 x acoustic guitar, Fiddle, Accordion, and Bodhran.

The manager has not provided a stage plan or channel list but has informed you that Vocals / acoustic Guitar is downstage centre with bass at stage right. Fiddle and accordion are placed stage left, Drums/bodhran upstage centre. He has also indicated that the band have requested four stage monitors (drum kit, keyboard, vocals and backing vocals) and would prefer four separate monitor mixes. The band are bringing no Backline other than drum kit.

Routing of all cables should avoid impeding Fire escapes and audience ingress / egress routes.

STUDENT BRIEF 5: Live sound requirements - Play in Goodlyburn theatre with seats in place.

You have been hired to provide a sound reinforcement system and live sound engineering services for a Play.

The Companies manager has booked the venue and provided the following information

Venue Details: GB theatre is a general-purpose receiving house, Capacity for this show 100, with the stage in the normal position. There are various power supplies in the venue. For this event the upper balcony area is not an audience and should be used for production instead.

Sources: There are to be at least 3 separate sound effect sources, 2 directional and 1 ambient, all speakers and play back equipment to be sourced. There are 4 actors that in this case will be wearing microphones for effect purposes and off-stage lines.

Routing of all cables should avoid impeding Fire escapes and audience ingress / egress routes.

STUDENT BRIEF 6: Live sound requirements - Small Musical In GB theatre with seats in removed and cabaret style seating.

You have been hired to provide a sound reinforcement system and live sound engineering services for a musical

The Companies manager has booked the venue and provided the following information.

Venue Details: GB theatre is a general-purpose receiving house, Capacity for this show 146, with the stage in the normal position.
There are various power supplies in the venue.

Sources: There are 8 cast members, all wearing mics, and a small band comprising 2 x keyboard players, drum kit (Kik, snare, OH), percussion player, bass, electric guitar, and one trumpet player. The band will be positioned on the balcony house right.

Off Stage monitors should be supplied for Stage manager and so that cast can hear the MD (on Keys) there should be facility for sound effects.

Routing of all cables should avoid impeding Fire escapes and audience ingress / egress routes.

EVIDENCE TO BE PRESENTED:

- A stage plan.
 - A venue plan showing loudspeaker placement, FOH position, multicore layout and mains power sources.
 - A comprehensive list of **all** required system components.
 - A wiring schematic/connection diagram detailing the interconnection of the sound reinforcement system, including cable/connector types.
 - A channel list.
 - Venue/client contact information.
 - A risk assessment document.
 - A short document summarising key health and safety requirements which should be considered while preparing for the event.
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- All documentation should be delivered electronically in a concise, professional format that can be printed if required for evidence.
 - Sources of equipment and information should be referenced clearly.
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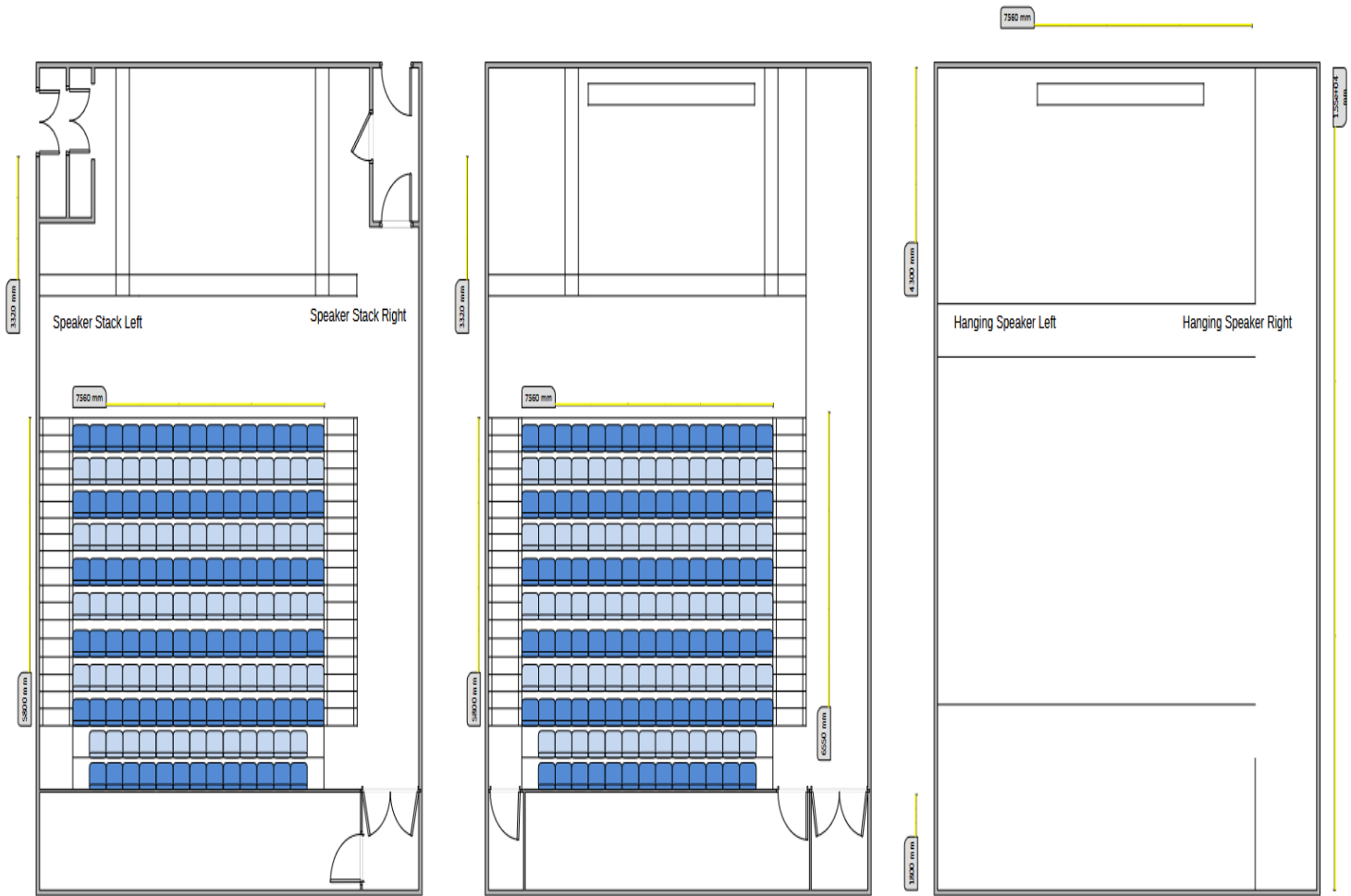
Stage Plan



Venue Plan/Contact details

STUDENT BRIEF 4: Live sound requirements - Band performing in the Goodlyburn theatre with seats in place

Costing/Expenditure Brief 4 (£36k)

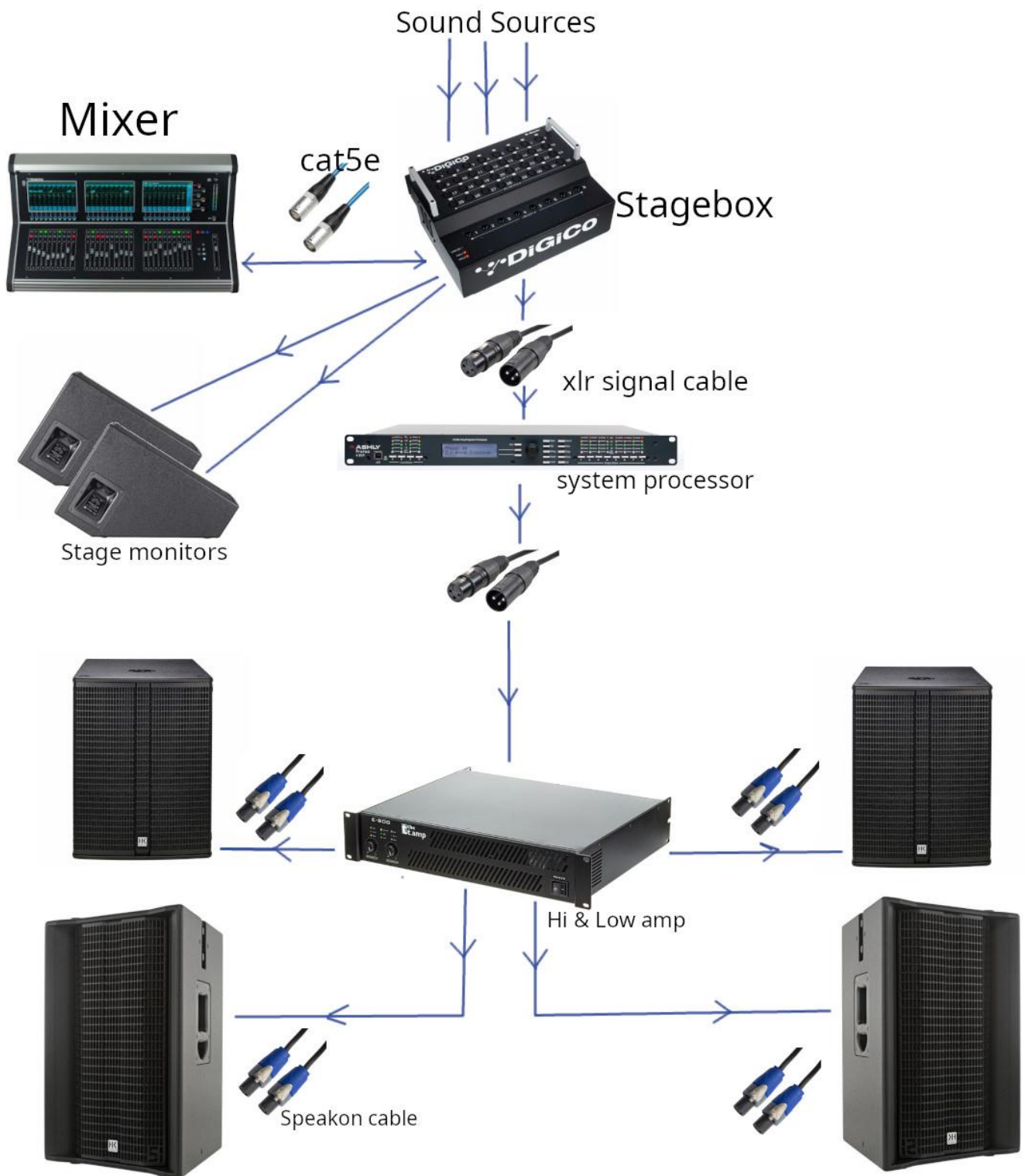


System Components

System Component	Item	Quantity	Notes
Mixer	Digico s31	1	48 inputs £8099
FOH	HKAudio 308LTAm2	4	Price: £6796 SPL: 138dB
	HKAudio 1800A	2	Price: £1918 SPL: 132dB
Stage monitors	HK Audio L5 115 F Linear 5	4	£2620
Stage box/Multicore	Digico d-rack2p	1	£4799
Microphone(Kick Low)	Md421	1	£333
Microphone (Kick Beater)	Md421	1	£333
Microphone (Snare bottom)	Lct140	1	£205 +48v
Microphone (Snare top)	Sm57	1	£96
Microphone (Hi Hats)	C414	1	+48v £205
Microphone (Rack Tom)	Atm25	1	£249
Microphone (Rack Tom)	Atm25	1	£249
Microphone(Floor Tom)	Atm25	1	£249
Microphone (Overheads)	Akg p820	2	+48v £524x2= £1048
Microphone (Vocals one)	Sm58	1	£94
Microphone (Vocals two)	Neumann u87	1	£2087 +48v
Microphone (acoustic guitar)	Sm81	1	£333 +48v
Microphone (accordion bass)	Md421	1	£333
Microphone (accordion keys)	Sm57	1	£96
Microphone (bodhran)	Md421	1	£333
Microphone (fiddle)	Sm81	1	£339
Microphone(bass cab)	Md421	1	£109

DI Boxes	BSS AR-133		
Boom Stand	Konig & Meyer 25910	1	£39
Short Stand	Konig & Meyer 27195	7	£210
Misc	Van Damme Classic XKE Female XLR to Male XLR Cables	25	Balanced xlr £1548.50
Power Distribution	n/a	n/a	n/a
Total Expenditure			£33,209.5

System Connection/schematic



Channel List

Channel	Instrument	Mic/DI	48	Insert	fx
1	kick beater	md421			
2	kick low	md421			
3	snare top	sm57			
4	snare btm	lct140	✓		
5	hihat	c414	✓		
6	rack tom	atm25		dbx266	
7	rack tom	atm25		dbx266	
8	floor tom	atm25		dbx266	
9	ride	lct140	✓	dbx266	reverb
10	oh left	akg p820	✓		
11	oh right	akg p820	✓		
12	bass	DI			
13	bass cab	md421			
14	acoustic guitar	sm81	✓		
15	accordion keys	md441			
16	bodhran	sm57			delay
17	vocal one	sm58			
18	vocal two	Neumann u87	✓		reverb
19	accordion bass	md421			
20	fiddle	sm81			reverb

Risk Assessment

Event					Location		
Date of Event					Date of Risk Assessment		
Completed by		Gareth Evans					
Hazard	Persons/Property at risk	Risk controls already in place	Risk assessment (LOW / MODERATE / HIGH)	Likelihood (LOW / MODERATE / HIGH)	Further action required	Person responsible	
Trip Hazard	Musicians, technical staff	Correct cable routing, secure cables, awareness of cables	Low	Low	None	Technical staff	
Electric Shock	Musicians, Technical Staff	Check Electrical cables for defects, wear and tear	High	Moderate	PAT Testing	Technical Staff, Competent and qualified person for PAT testing.	
Falling objects	Technical staff, Musicians, General public.	Use Correct ground support that adheres to LOLER Regulations	Moderate	High	LOLER inspection	Technical Staff, LOLER qualified person	
Noise, Sound Levels	Everyone	Employ the services of a suitably qualified sound engineer	Moderate	Low	Monitor sound levels to local authority guidelines	Sound engineer	

Health & Safety Summary

Report all Health and Safety concerns to a qualified individual to resolve issues and mitigate liability. It is my responsibility to visually check all equipment in place, but the responsibility should

end when it is out with my training or skillset . Referring to a qualified individual such as a PAT tester or qualified sound engineer.

ASSESSMENT RECORD: OUTCOME 1

LEARNER NAME		CLASS	
STUDENT ID		GROUP	

OUTCOME 1: Engage in and contribute to the process and product of the host company

EVIDENCE REQUIREMENTS	Pass/fail (✓)	COMMENTS
Stage plan Venue plan showing loudspeaker placement, FOH position, multicore layout and mains power sources Comprehensive list of all required system components Wiring schematic/connection diagram detailing the interconnection of the sound reinforcement system, including cable/connector types Channel list Venue/client contact information Risk assessment document Short document summarising key health and safety requirements which should be considered while preparing for the event Overall Portfolio evidence		

COMMENTS:			
ASSESSOR'S NAME		DATE	
ASSESSOR'S SIGNATURE		STUDENT'S SIGNATURE	

OUTCOME1, 2 & 3 assessor checklists

Sound Production: Sound For Live Events J01C 34

Student Progress and Assessment Check Sheet

Student name:

LO 1

Prepare for a Live Event(s)

correctly specify a sound reinforcement system

Collate the Following Documentation

Stage Plan

Venue Plan-speaker placement-FOH position-showing all cable routes

Wiring Schematic/Connection Diagram

Channel List

Venue-Client Contact Information

Risk assessment

Health and safety Summary

Date Comp

Assessor-Sig

LO 2 & 3

Assemble test and sound check a sound system-and performance

Stage 1 - Assemble and test

Safe, efficient and correct set up and use of equipment

Effective use of parameters to control feedback

Effective fault finding and effective remediation of faults

Appropriate handling of cables

Stage 2 - Sound Check

Yes	No

UNIT ASSESSMENT CHECKLIST

LEARNER'S NAME		CLASS	
LEARNER'S ID		GROUP	

OUTCOME	Pass/fail	COMMENTS	
1. Prepare for a live event			
2. Assemble, test and sound check a sound reinforcement system.			
3. Operate a sound reinforcement system for a live event.			
ASSESSOR'S NAME		DATE	
ASSESSOR'S SIGNATURE		STUDENT'S SIGNATURE	