

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.

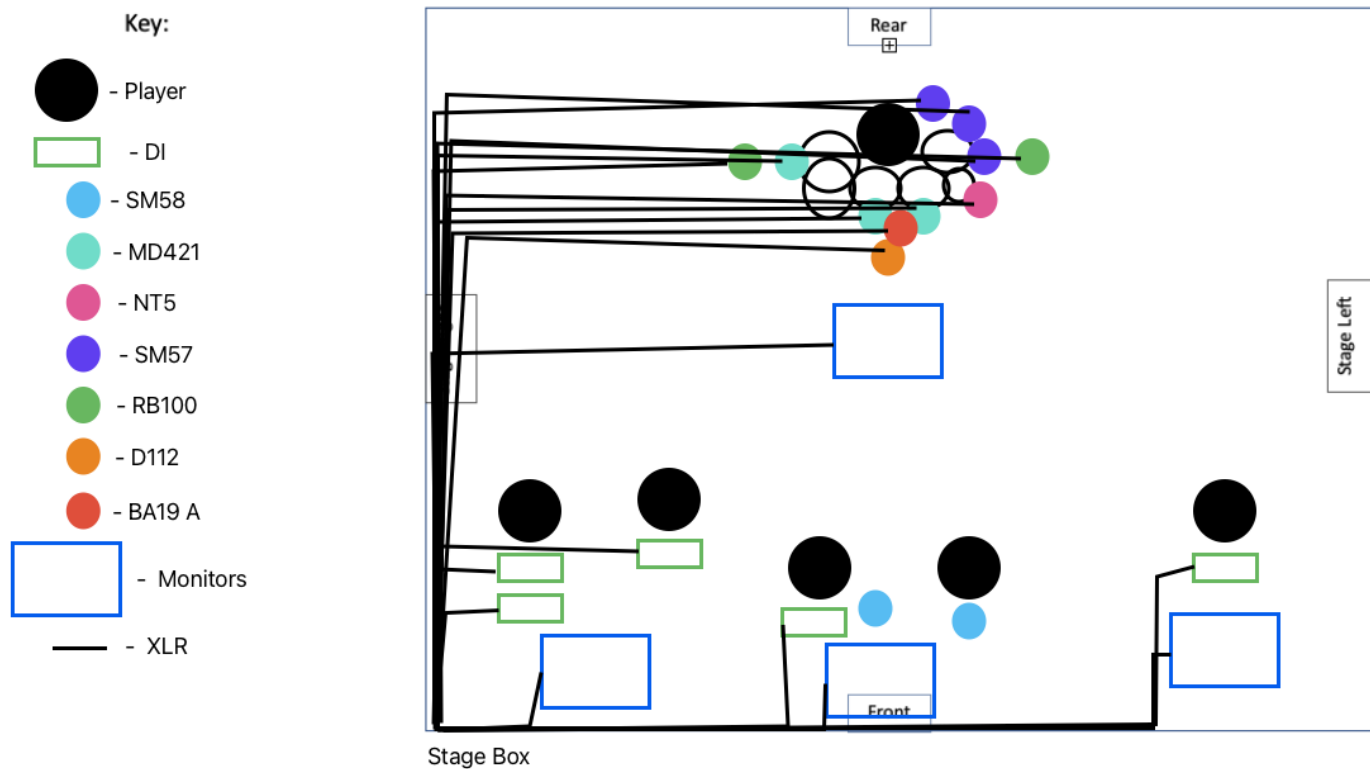
Sources: There are 8 cast members, all wearing mics, and a small band comprising 2 x keyboard players, drum kit (Kik, snare, OH), percussion player, bass, electric guitar, and one trumpet player. The band will be positioned on the balcony house right.

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.

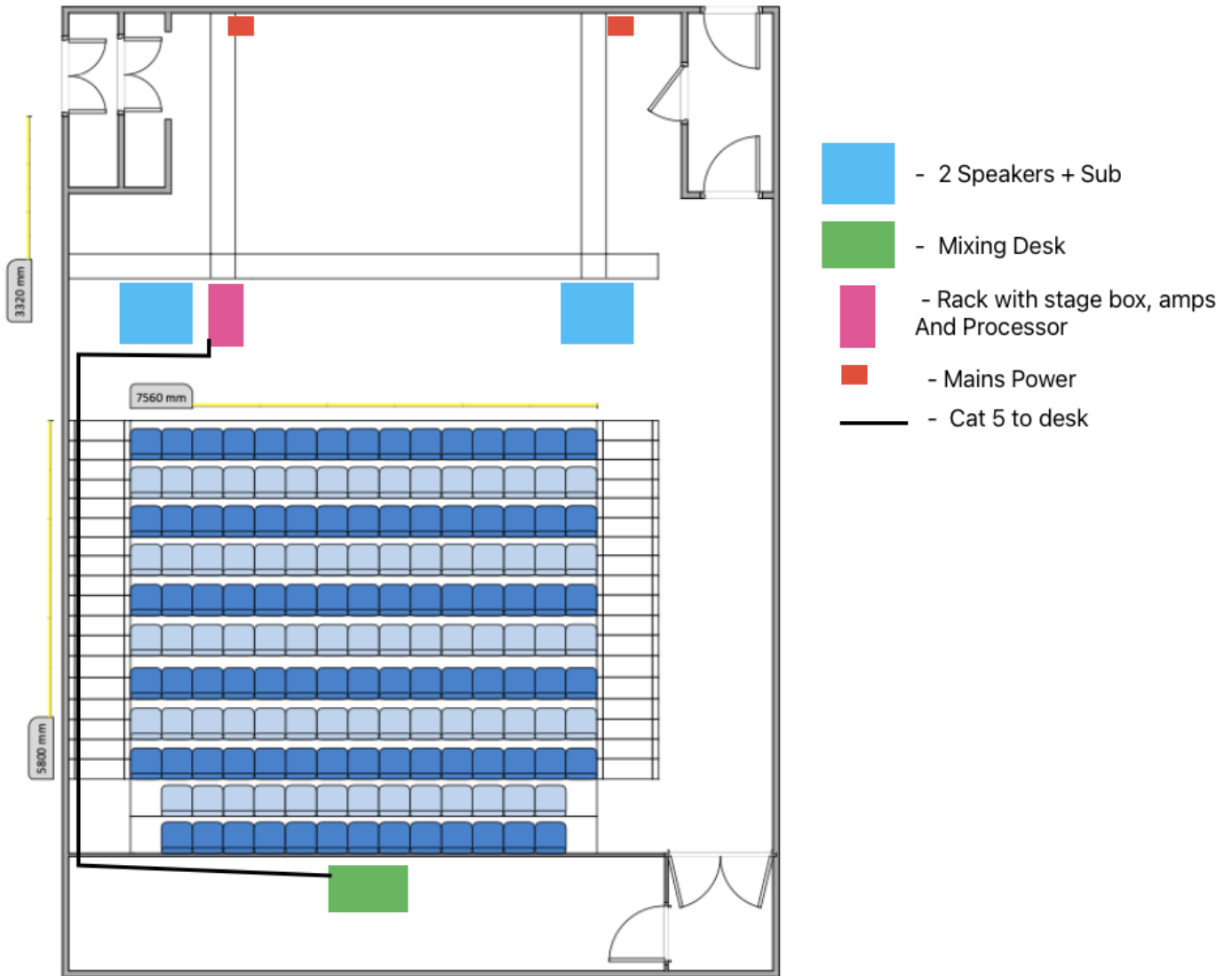
Routing of all cables should avoid impeding Fire escapes and audience ingress / egress routes.

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

System Component	Item	Quantity	Notes
Mixer	Midas M32	1	£3,869 for desk, stage box and a cat 5 The reason I picked the Midas M32 over the similarly priced Allen and Heath SQ 5 is that I have some experience with small gigs on the M32R so I know I like the workflow of the M32 family. The SQ 5 has a more complex workflow than is needed for a small gig such as this and I don't think the extra cost is worth it as it would stretch the rest of my budget thinner with little return.
FOH	The Box Pro Achat 208 HL	2	£514 x 2
	The Box Pro Achat 208 HL	2	£511 x 2
	The Box Pro Achat 115 sub	2	£335 x 2
	Behringer KM1700	3	£215 x 3
	T.racks DSP 206	1	£277 =£3652
Stage monitors	Mon P15	4	£249 x 4 =£996
Stage box/Multicore	Midas DL32	1	
	Klark Teknik NCAT5E-50m	1	
Microphone (Kick)	D112	1	£133
	BA19 A	1	£48 =£181
Microphone (Snare/El. Gtr)	SM57	3	2 for snare, 1 for bodhran £88 x 3 =£246
Microphone (Hi Hats)	Rode NT5	1	£169
Microphone (Rack Tom)	MD421	2	£319 x 2 =£638
Microphone (Floor Tom)	MD421	1	£319
Microphone (Overheads)	RB100	2	£66 x 2 =£132

Microphone (Vocals)	SM58	2	£89 x 2 =£178
DI Boxes	AR 133	5	£109 x 5 (Extra in case band brings keyboard too because brief isn't clear) =£545
Boom Stand	K&M 21021	5	£61 x 5 =£183
Short Stand	K&M 25950	7	£41 x 6 =£246
Cables	Pro snake speaker cable 10m Pro snake tpm10 PC15 Power Audio	6 17 4	£24.90x6 £9.50 x 17 £46 x 4 =£494.90
Cables	Tpm10 for amps	6	£9.50 x 6 =£57
Power Distribution	N/A		
Micellaneous			TOTAL = £12,003

System Components



System Connection/schematic

C hannel List						
Channe l	Instrument	Stan d	Mic/DI (or similar)	Comp/Gat e	F X	Notes
1	Kick In	-	BA19 A	Comp, Gate	-	
2	Kick Out	Sho rt	D112	Comp, Gate	-	
3	Snr Top	Sho rt	SM57	Gate	-	
4	Snr Bot	Sho rt	SM57	Gate	-	
5	HH	Sho rt	NT5	Gate	-	
6	Rack 1	Sho rt	MD421	Gate	-	
7	Rack 2	Sho rt	MD421	Gate	-	
8	Floor	Sho rt	MD421	Gate	-	
9	OH L	Boo m	RB100	-	-	
10	OH R	Boo m	RB100	-	-	
11	Bod	Boo m	SM57	Gate	-	
12	Gtr	-	AR 133	-	-	
13	Bass	-	AR 133	-	-	
14	Fiddle	-	AR 133	-	-	
15	Acor	-	AR 133	-	-	
16	Keys	-	AR 133	-	-	
17	Vox 1	Boo m	SM58	Comp	V er b	
18	Vox 2	Boo m	SM58	Comp	V er b	
19						
20						
21						

22						
23						
24						

Channel List

Risk Assessment

Event					Location		
Date of Event					Date of Risk Assessment		
Completed by		Student Name					
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 hazards	Stage crew, clients, engineers	Make people aware, secure them, minimise cable runs	Moderate	Low	None	Engineer	
Electrical faults/electrical shocks	Clients, engineers	Visually check cables	High	Moderate	PAT test	Engineer, competent tester	
Lifting and heights/danger of falling objects	Engineers, clients, audience	Rig things to the best of your ability	High	Low (Event dependant)	In adherence with LOLER regulation	Engineer, LOLER tester	
Noise levels	Everyone	Suitably qualified engineer in charge	Moderate	Low	Dose monitoring, suitably equipped, environmental engineer	Engineer, environmental engineer	

Health & Safety Summary

ASSESSMENT RECORD: OUTCOME 1

LEARNER NAME	Harrison Maloney	CLASS	HNC Sound for Live Events
STUDENT ID	24015171	GROUP	Group 2

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

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

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

Appropriate setting of gain structure for a variety of sources
 Effective communication with performers and other relevant parties
 Appropriate use of equalisation, dynamics and time-domain processing for a variety of sources

Stage 3 - Performance Event

Following safe working practices

Operation of the following parameters

Gain

EQ

Routing

Dynamic processing

Aux sends and returns

Time domain Processing

Implement appropriate adjustments in line with requests from performers

Making use of appropriate corrective sound reinforcement techniques

Making use of appropriate creative sound reinforcement techniques

Establishing an appropriate balance and blend of sound sources

Overall Pass/ Fail

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Date comp:

Assessor Sig

Comments

Assessor sig:

Student Sig:

Date comp:

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	