

risk assessment

The Severity and Probability rating in this assessment is as follows:

<u>Probability (P)</u>		<u>Severity (S)</u>	
0	Practically impossible	0	No injury, no damage
1	Very unlikely	1	Very minor, minimal First Aid
2	Unlikely	2	Minor injury, slight damage
3	Possible	3	Serious, absence from work moderate damage to property
4	Very likely	4	Major injury, major property damage
5	Almost certain	5	Permanently disabling injury, fatality, severe damage/loss to property

Key to Evaluation: -

- When severity and probability are both Low the risk is negligible and can be ignored.
- When severity and probability are both High the risk is unacceptable and only permitted with proper documented procedures.
- When severity and probability are different the risk must be controlled or minimized

		LIKELY/PROBABLE	POSSIBLE	REMOTE/IMPROBABLE
SEVERITY	HIGH	MAJOR/FATAL 5	HIGH 4-5	MEDIUM 2-3
	MEDIUM	SERIOUS/DISRUPTIVE 4-5	HIGH/MEDIUM 3-4	MEDIUM/LOW 2-3
	LOW	MINOR/DISRUPTIVE 1-3	LOW 1-2	LOW 1-2

preventative measures

Equipment Detail/Task:	<i>Loudspeakers - 'flown'</i>
Risk:	Equipment/materials/Person Falling from supports. Strain from lifting/dragging.
Who is at risk?:	Riggers, other working crew public and property.
Means of Elimination:	<ol style="list-style-type: none">1) All crew supervised by a competent person.2) All crew to be competent in the task they are asked to perform.3) Floor working area to be kept clear as far as possible whilst 'overhead' work is carried out.4) Adequate number of personnel and equipment used to manoeuvre large/heavy equipment.5) Emergency exits and gangways to be kept clear at all times.6) Secured to bar by proprietary clamp and with secondary support from wire or either safety chains via 8mm welded eye-bolt direct to the cabinet.7) Secured by proprietary 'flying' hardware.8) Any flown equipment must have a secondary bond. Bonds should be at least 3mm steel (not chain).9) Access to the working area to be restricted to essential personnel only.

Severity rating: 4 Probability rating: 1 Risk rating(SXP): 4

Equipment Detail/Task:	<i>Loudspeakers on stands</i>
Risk:	Knocked over. Tripping over legs.
Who is at risk?:	Riggers, other working crew, public and property.
Means of Elimination:	<ol style="list-style-type: none">1) All crew supervised by a competent person.2) All crew to be competent in the task they are asked to perform.3) Adequate number of personnel and equipment used to manoeuvre large/heavy equipment.4) Emergency exits and gangways to be kept clear at all times.5) Cabinets fixed to stands with with proprietary brackets.6) Stands indicated with chevron of white,grey or yellow 50mm widw tape, to ground surface, marking the perimeter of the foot span (to reduce the risk of a trip hazard). The nearest leg should also be marked with white tape.

Severity rating: 1 Probability rating: 3 Risk rating(SXP): 3

Equipment Detail/Task:	<i>Cables</i>
Risk:	Trip hazard.
Who is at risk?:	Crew and public
Means of Elimination:	<ol style="list-style-type: none">1) All crew supervised by a competent person.2) All crew to be competent in the task they are asked to perform.

- 3) Adequate number of personnel and equipment used to manoeuvre large/heavy equipment.
- 4) Emergency exits and gangways to be kept clear at all times.
- 5) All cables either under dedicated cable 'walkovers' or secured to surface with 50mm adhesive tape and indicated by either white, yellow or hazard striped tape.
- 6) Every care should be taken to ensure that cable routes do not cross access routes or emergency exits.
- 7) Every care should be taken to ensure that taping does not lead to venue damage.
- 8) Plastic cable ties should be used on all metal work (care must be taken when removing ties not to scratch paintwork).

Severity rating: 1 Probability rating: 3 Risk rating(SXP): 3

-Equipment Detail/Task: *Loudspeakers stacked*

Risk: Knocked over, upper cabinets separating from lower cabinet.

Who is at risk?: Crew, public and property

- Means of Elimination:**
- 1) All crew supervised by a competent person.
 - 2) All crew to be competent in the task they are asked to perform.
 - 3) Adequate number of personnel and equipment used to manoeuvre large/heavy equipment.
 - 4) Emergency exits and gangways to be kept clear at all times.
 - 5) Correct 'fall' distance provided between public and stack and barriers provided by client and
 - 6) if appropriate, cabinets strapped together.

Severity rating: 3 Probability rating: 1 Risk rating(SXP): 3

Equipment Detail/Task: *Microphones*

Risk: Earth leakage, electrocution.

Who is at risk?: Artiste, client and crew

- Means of Elimination:**
- 1) All crew supervised by a competent person.
 - 2) All crew to be competent in the task they are asked to perform.
 - 3) Wired microphones are connected to the control equipment via a screened cable. All screening is connected to 'ground' at the control source. All equipment both electronically and electromagnetically grounded to 'earth.
- Where 'radio microphones used, fault does not apply as user is not connected to PA source and cannot be grounded.

Severity rating: 5 Probability rating: 2 Risk rating(SXP): 10

Equipment Detail/Task: *A/C Power and Distribution Units*

Risk: Mains faults. Electric shock, tripping over cables, fire.

Who is at risk?: Artiste, crew and property

- Means of Elimination:**
- 1) All crew supervised by a competent person.
 - 2) All crew to be competent in the task they are asked to perform.
 - 3) All units fitted with MCB's or and status neons for visible warning.4)

All working areas to be kept clear as possible of all other working personnel and equipment during production.

- 5) The use of RCCD protection
- 6) All equipment to have met by insurance requirements of holding a current PAT certificate.
- 7) Use of the correct size and value cabling.
- 8) All exposed cables to be covered in public areas.

Severity rating: 5 Probability rating: 2 Risk rating(SXP): 10

Equipment Detail/Task: *Loading & unloading of equipment*

Risk: Size & weight of equipment, strain from lifting/moving of heavy objects, falling equipment from stacked loads etc.

Who is at risk?: Riggers, crew, property

- Means of Elimination:**
- 1) All crew supervised by a competent person.
 - 2) All crew to be competent in the task they are asked to perform.
 - 3) Access areas to be kept clear where possible.
 - 4) Adequate number of personnel and equipment used to manoeuvre large/heavy equipment.
 - 5) Loading ramps to be used where appropriate.

Severity rating: 1 Probability rating: 3 Risk rating(SXP): 3

Equipment Detail/Task: *Flightcases storage & packing containers etc.*

Risk: Dropping onto toes, catching fingers, knocking and damaging property. Strain from lifting too heavy a load.

Who is at risk?: Crew, property

- Means of Elimination:**
- 1) All crew supervised by a competent person.
 - 2) All crew to be competent in the task they are asked to perform.
 - 3) Adequate number of personnel and equipment used to manoeuvre large/heavy equipment.
 - 4) All Libra Audio Equipment is visually stencilled indicating it's total weight.
 - 5) All items over 40kgs is advised that two or more persons are required to lift.
 - 6) All personnel are advised on usage of PPE

Severity rating: 1 Probability rating: 3 Risk rating(SXP): 3

Equipment Detail/Task: *Use of sound equipment during event*

Risk: Loud noise, high pressure sound levels.

Who is at risk?: Riggers, crew and public

- Means of Elimination:**
- 1) Exposure to high pressure sound levels kept to a minimum.
 - 2) All crew to be supervised by a competent person.
 - 3) All crew to be competent in the task they are asked to perform.
 - 4) Ear defenders provided for all staff in line with regulation 8:1 of the Noise at Work Regulations 1989.
 - 5) Equipment is properly maintained.
 - 6) An Ear Protection Zone (EPZ) is demarcated. where crew/personnel can retire and reduce fatigue and long term damage.
 - 7) The noise exposure to guests would be well within the limits set by the Home Office and local authority and instruction dictated by our client.
 - 8) Regular breaks in less noisy areas are taken so as to keep within the first action level of noise at work regulations.

Severity rating: 3 **Probability rating:** 5 **Risk rating(SXP):** 15

Equipment Detail/Task: *General movement of equipment*

Risk: Movement in restricted spaces, loading from lifts, rear of truck, carrying up stairs, etc.

Who is at risk?: Riggers, crew, public and fabric of venue.

- Means of Elimination:**
- 1) Items over 2 metres in length carried by 2 people
 - 2) Heavy items to be carried by the appropriate number of persons.
 - 3) All crew to be competent in the task they are asked to perform.
 - 4) Not to exceed any loading restrictions.
 - 5) 'Roll-off' panels are enabled on vehicle tail-lifts.
 - 6) Appropriate PPL is worn for application.
 - 7) Barriers or identified movement areas are clearly identified to keep members of the public at a safe distance.

Severity rating: 5 **Probability rating:** 8 **Risk rating(SXP):** 8