STEP 1

HAZARD

Look only for hazards which you could reasonably expect to result in significant harm under the conditions in your workplace. Use the following examples as a guide

* slipping/tripping hazards (eg poorly maintained floors or stairs)
* fire (eg from flammable materials)
* chemicals (e.g. battery acid)
* moving parts of machinery e.g. blades)
* work at height (e.g. from mezzanine floors)
* vehicles (e.g. fork-lift trucks)
* electricity (e.g. poor wiring)
* dust (e.g. from grinding/sawing)

e fumes (e.g. welding/spraying & soldering)

* manual handling
* noise
* poor lighting
* low temperature

STEP 2

Who might be harmed?

There is no need to list individuals by name -just think about groups of

people doing similar work or who may be affected, eg

* office staff
* maintenance personnel
* contractors
* people sharing your workplace
* operators
* cleaners
* members of the public

Pay particular attention to:

* staff with disabilities
* visitors
* inexperienced staff
* lone workers

They may be more vulnerable

STEP 3

Evaluation-Is more needed to control the risk?

For the hazards listed, do the precautions already taken:

* meet the standards set by a legal requirement?
* comply with a recognised industry standard?
* represent good practice?
* reduce risk as far as reasonably practicable?

Have you provided:

* adequate information. instruction or training?
* adequate systems or procedures?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place.

(You may refer to procedures, company rules, etc.)

Where the risk is not adequately controlled, indicate what more you need to do (the 'action list')

STEP 4

Record you findings

STEP 5

Review and revision

Set a date for review of the assessment (see opposite).

On review check that the precautions for each hazard still adequately control the risk. If not indicate the action needed. Note the outcome. If necessary complete a new page for your risk assessment.

Making changes in your workplace, eg when bringing in new

- machines
- substances
- procedures

may introduce significant new hazards. Look for them and follow the steps

risk assessment

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

	Probability (P)		Severity (S)
0	**Practically impossible, extremely unlikely**	0	**No injury, or damage to property**
1 ,	**Very unlikely**	1	**Very minor, minimal damage to property First Aid**
2	**Unlikely**	2	**Minor injury, slight damage to property**
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

SEVERITY		REMOTELY IMPROBABLE	POSSIBLE	LIKELY PROBABLE
HIGH	MAJOR/FATAL	21-22	22-24	24-25
MED-HIGH			16-20	
MEDIUM	SERIOUS/DISRUPTIVE	11-12	12-14	14-15
LOW-MEDIUM			6-10	
LOW	MINOR/DISRUPTIVE	1-2	2-4	4-5

preventative measures

Equipment Detail/Task: ***Loudspeakers - 'flown'***

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:

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.

10) All equipment will be operated by following any manufacture's instructions

11) Floor working areas to be kept clear as far as possible whilst overhead work is being carried out.

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

Equipment Detail/Task: ***Loudspeakers on stands***

Risk: Knocked over. Tripping over legs.

Who is at risk?: Riggers, other working 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) Cabinets fixed to stands with with proprietary brackets.

6) Stands indicated with chevron of white,grey or yellow 50mm wide 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.

7) Floor working areas to be kept clear as far as possible whilst overhead work is being carried out.

8) All stands to be of suitable capacity for the load and environment.

Severity rating: 2 **Probability rating:** 3 **Risk rating(SXP):** 6

Equipment Detail/Task: ***Cables***

Risk: Trip hazard./elec

Who is at risk?: Crew, performers and public

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) 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).

9) Floor working areas to be kept clear as far as possible whilst overhead work is being carried out.

Severity rating: 2 **Probability rating:** 3 **Risk rating(SXP):** 6

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.

7) Floor working areas to be kept clear as far as possible whilst overhead work is being carried out.

8) Stage/performance area should be of a solid and sound construction. If this is not the case, then Libra Audio will identify the increases risk elements with all relevant and responsible parties before a decision to proceed is taken.

9) Prevention of members of the public from accessing the stage/performance area-unless approved by performers, event organisers and Libra Audio-at any time before, during or after the event.

Severity rating: 4 **Probability rating:** 3 **Risk rating(SXP):** 12

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: 4 **Probability rating:** 3 **Risk rating(SXP):** 12

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: 4 **Probability rating:** 3 **Risk rating(SXP):** 12

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 or be carried.

6) All personnel are advised on usage of PPE

Severity rating: 2 **Probability rating:** 3 **Risk rating(SXP):** 6

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

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

Who is at risk?: Artiste, crew, possibly 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) 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 RCD 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.

9) All equipment will be operated by following any manufacture's instructions

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

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.

9) All equipment will be operated by following any manufacture's instructions

10) Calculations presented for those in immediate and constant exposue to noise.

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

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**