

Equations of a Falling Body

Laura Boynes



Technical Specification

March 2024

Toured By Performing Lines

Producer

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Notes About This Document

The following document sets out the Technical Requirements and support to be provided to the Company by the Presenter. Production elements are being modified to adapt to the constraints of touring. Obviously, sites and circumstances of performances will differ, so we welcome suggestions or solutions to our requirements from individual presenters and festivals. Please contact us directly to discuss any issues.

Cast & Creative Team

Choreographer & Director	Laura Boynes
Dramaturg	Anthony Coxeter
Mentor & Outside Eye	Lucy Guerin
Lighting Designer	Matt Marshall
Lighting Realiser	Peter Young
Set & Costume Designer	Bruce McKinven
Sound Design & Composition	Tristen Parr / Felicity Groom
Movement Consultant	Adelina Larsson

Performers

Ella-Rose Trew
James O'Hara
Timothy Green

Production Manager Mark Haslam

Produced by Performing Lines WA

Safety

Performing Lines has an unwavering commitment to safety. It is expected that the venue will be staffed by technicians whose duties are matched with relevant skills, knowledge, training and fitness. Prior to the commencement of work on stage, the Touring Production Manager will deliver a Toolbox Talk outlining the workplan for the day and potential challenges associated. All rostered venue crew are required to attend. Conversely, it is expected that a venue representative will go through safety procedures with the Touring Company. If the venue has any concerns regarding the safety of a production, please discuss with the Touring Production Manager or alternatively contact the Performing Lines Production Manager.

Performance Description

Equations of a Falling Body is a dance/physical theatre work utilising real-time choreography to explore the idle distractions, radical interruptions or insistent voices inside that re-shape and cypher our thoughts and desires.

Venue	<i>Equations of a Falling Body</i> is ideally performed on an end stage, though proscenium arch theatres are also possible with some consideration of sightlines to the floor choreography. Please contact Performing Lines if you have any concerns about the venue configuration, as alternative staging may be possible. Sprung, non-raked floor surface with no uneven areas, covered in black, low-gloss dance floor (Tarkett) is required.
Running time	75 minutes, no interval
Minimum Stage Dimensions	14m width x 14m depth Please note that the show begins and ends with the reveal of a deep performance area upstage of the main playing area. In the original production this involved a total stage depth of 25m. Outside of these sections the work is performed inside a curtained area as described below. Please contact us to discuss options to realise this requirement in your venue.
Minimum Performance area	12m width x 8m (Setting line to mid-stage curtain) As mentioned the work requires the reveal of an alternative space upstage of this performing area. Please contact us to discuss.
Height	minimum 6m to bottom of lamps
Load-in Time (initial presentation)	Opening on third night Note: Lx pre-rig required
Video link	https://vimeo.com/805833616
Warnings	No warnings

Personnel

Touring Company

- 1 x Director / Choreographer
- 3 x Performers
- 1 x Production Manager
- 1 x Mechanist
- 1 x Stage Manager

In addition, the Lighting and Sound Designers, Set Designer and Dramaturge (or Outside Eye) may be required for the first venue in any tour.

Presenter To Supply

- Bump in/bump out crew (as per schedule)
- Lighting programmer / operator for load-in and for all technical and show calls
- Sound operator for all technical and show calls
- Show Mechanist. This person will assist the touring mechanist in preparing the space and assembling the “Apocalypse” during the show.

Staging

The main performance area of *Equations of a Falling Body* has a clear playing space, which is gradually populated by a number of elements through the show (including a large fan, fake grass and silver insulation). Upstage of this area is a shallow pool (6mx5mx50mm deep in the original production) into which a performer is lowered at the top of the show. Between the pool and the main playing space is an area where a performer is exposed to a number of elements, including water, heat and air.

In the original season Wahlberg DMX winches were used to create the reveals on the side and rear of the playing space. If available, these are a solution to the rigging required below. Alternatively, these will be substituted for the in-house fly systems in proscenium arch venues, and tab track systems in venues without fly-systems.

While the following sections list the equipment required to achieve these effects in the original production, we imagine that each of these elements will need to be reimagined in subsequent seasons in response to the unique circumstances of each venue. Please contact us to discuss.

Touring Company To Provide

- All costume elements, and some set pieces, furniture and props including but not limited to:
 - o Timber frame to create approx 5m x 6m x 50mm deep pool
 - o 2 x pumps to drain pond at conclusion of season
 - o Black rubber pond liner to line pool
 - o 4 x industrial floor fans – to be rigged between the pool and main performance area.
 - o 1 x 3m x 75cm roll of artificial grass – to be rigged and released overhead main performance area
 - o 2 x 2.4m x 75cm rolls of silver insulation – one to be rigged and pulled down into main performance area
 - o 1 x timber holder for insulation
 - o 2 x piece of pvc pipe (for silver insulation and artificial grass)
 - o 1 x directors hut (a Perspex and steel frame)

- 1 x harness and carabiner for performer lowering
- Props including megaphones, plastic sheets, coveralls, buckets etc.
- Detailed Production Risk Assessment

Presenter To Supply

- Approved, recent venue plans and current technical specifications
- Appropriate ladders/EWPs for access to OH Rig
- Access to basic tools including tech guns, shifters, hammers, saws etc
- Stage area masked on all sides with flat black drapes. Side masking should be able to fly in-out to allow props to be retrieved and the fan to be brought into the space. Alternatives to this may be possible if this is not achievable in your venue.
- Full-stage flat black drapes at the rear of the main playing space. These must be able to either fly or be on a centre-opening tab track to reveal the upstage space at the start and end of the show.
- A rigging position set upstage able to safely support the slow lowering of a 70kg human performer (travel from a height of 3m to ground level over 90 sec). This can either be achieved through the use of a flytower or ground-supported truss arch. All rope, spansets, pulleys etc to create this effect are the responsibility of the presenter to provide. Please contact us to discuss.
- Black Tarkett to cover entire performance area (12m by 8m, or from the setting line to the masking framing the main performance area).
- Black PVC tape to secure Tarkett
- Additional Tarkett / flooring to prevent water damage in space between pool / main playing area.
- Items to create “The Apocalypse” – see below
- 1 x very large industrial fan (e.g. <https://bigassfans.com/au/industrial/black-jack/>)
- 6 x Sets of Push up drape poles with 4m wide x 6m high black wool drapes (for rear space) – can be flown if in venues with fly towers
- 2 x Chlorine tablets for each day production in in your venue (for pool)
- Access to a hose / running water nearby pool
- 10 x 10kg shotbags
- 10 x 2.4m x 2.4m plastic dropsheets
- 2 x rolls of clear plastic tape (sticky-tape)
- 2 x 15m lengths of 10mm black rope (able to be cut as required)
- 1 x roll of Nashua matte black gaffer tape
- 1 x roll heavy duty double sided tape
- Adequate backstage blues (to be placed at the Company’s discretion upon arrival at venue)
- Note the performance venue should be cleaned throughout the season

THE APOCALYPSE

At the conclusion of *Equations of a Falling Body* the mid-stage curtain is raised to reveal a space transformed from the opening image to a wasteland described by the company as “The Apocalypse”. This is designed to be a collection of items strewn through and over the pool.

For the original season this consisted of:

- E-waste, including:

- Printers
- Telephones
- Fax machines
- Old Speakers
- Keyboards and mice
- Scrunched newspaper
- Insulation foil
- Foam packaging
- Plastic dropsheets
- A ladder
- Fake grass

Variations on this are invited from your venue, however the Company requests that no new waste is created in building this scene, with the strong preference being the use of already discarded / recyclable materials.



Lighting

Lighting for *Equations of a Falling Body* is a mix of generic and LED fixtures, as well as Wireless DMX headtorches worn by the cast (toured). In one section 2 Cold Spark machines are brought onto stage by a performer wearing safety glasses. These are cleared at the conclusion of a movement sequence.

An LX pre-rig is to be completed by the Presenter prior to the Company's arrival at the venue with all fixtures being patched, coloured and flashed. It is assumed that all provided fixtures will be fully operational and compliant with relevant safety standards and associated barn doors, gel frames safety chains etc will be made available to the Company.

Lighting Ops position for the performance is to be located FOH with a clear, unobstructed view of the stage.

A lighting programmer familiar with the venue and console should be provided from the beginning of load-in through to the opening performance. Lighting will be called by the Stage Manager from FOH.

The following list of equipment is representative of the initial performance season and may be adapted to suit venue stock where practical and expressly approved by the Performing Lines PM prior to our arrival at our venue.

Touring Company To Provide

- Venue specific lighting plan (minimum of 2 weeks out from presentation)
- 4 x Wireless DMX Headtorches (3 + 1 spare).

Presenter To Supply

- 8 x ETC Source4 Lustr Zoom 25°-50° (Series 2 or 3)
- 7 x SGM P5 Floodlights w/ 21° lens and barn doors
- 4 x Mac Viper Performances
- 4 x Mac Viper Washes
- 8 x Mac Quantum Washes
- 5 x Selecon Arena 2k Fresnels
- 9 x Selecon 1k Fresnels
- 3 x 500w QI Flood (may be LED if not available)
- 2 x Cold Spark machines (plus powder for the season)
- 8 x AA batteries **per performance**. High-quality rechargeable batteries preferred.
- 8 x AAA batteries **per performance**. High-quality rechargeable batteries preferred.
- Hazer(s) to provide an even haze throughout the space
- Completed pre-rig
- List of current available LX stock
- All colour, pre-cut and added to fixtures. Please contact the Touring Production Manager should you not be able to obtain a specific colour for advice on substitutions. Please ensure you have sufficient stocks of colour to accommodate burn out.
- All cabling, colour and power + standard LX consumables (bubbles, electrical tape etc).

Sound

The soundtrack for *Equations of a Falling Body* is pre-recorded music and effects run from a MacBook Pro running Qlab. In addition, all performers wear in-ear monitoring, allowing them to take instruction from the choreographer sitting at the front of stage.

Audio Ops must be located in the auditorium rather than a bio box.

- The audio setup for *EQUATIONS OF A FALLING BODY* requires a full range stereo FOH system, ideally hung low within the space. Front fill and delays may be required for wide / larger performance venues.
- Examples of equipment are for reference only and do not specify exact requirements, as this should be determined in consultation with the venue.
- All options should be communicated to the Production Manager PRIOR to the Company's arrival at the venue.
- A sound operator is required for the duration of the company's time in the venue, including during all tech and show calls. This operator will be responsible for Eq'ing the space and monitoring the sound levels through the piece. Familiarity with the venue and provided console, and a working knowledge of Qlab, is required.
- Please note that there is the chance that the in-ear monitors worn by the cast will be exposed to water. As part of the process of mic-ing up the cast, the in-ear backpacks are secured in plastic bags and wrapped to reduce this risk. Items to achieve this water-proofing are the venues to provide.

Touring Company To Provide

- 1 x MacBook Pro computer with QLab software with signal sent via Dante.

Presenter To Supply

- High quality professional sound system appropriate for space and capable of significant SPL (110db without distortion at ops) with a low visual profile.
- This loudspeaker system must be sufficient enough to provide a high level of amplification equivalent to the size of the venue, and reinforced with suitable subwoofers with their own send from the console.
- Each loudspeaker requires its own individual output send from the console.
- Left and Right speakers upstage (12" full-range speaker on stand placed either side of rear stage)
- Left and Right subwoofers upstage
- Surround speakers covering entire performance area

- **Console**
Behringer X-32C Digital Mixing Console (with Dante option card) or similar

- **Microphones**
 - 4 x Rode M5 Pencil Condenser or Similar.
 - 1 x SM58 with on off / talks button for Choreographer in the Director's Hut

- **In-ear Monitors**
 - 1 Sennheiser Helical Antenna
 - 2 Shure P10T PSM1000 Dual transmitter (J8E 554-626)

- 4 Shure P10R Beltpack Receiver (J8E 558-626)
 - 4 Shure SE315 IEM Earbud
 - Plastic bags, tape (both tape for skin to secure earbuds and tape for securing plastic bags)
- Batteries for radio microphones (Good quality rechargeable preferred)
 - All power and signal requirements

Inputs

Channel	Desk Input	Location	Routing channel and notes
1	QLAB - Left	Desk	Desk 1
2	QLAB - Right	Desk	Desk 2
3	QLAB – Upstage FX L	Desk	Desk 3
4	QLAB – Upstage FX R	Desk	Desk 4
5	QLAB – FOH Centre Main	Desk	Desk 5
6	QLAB – FOH Sub`	Desk	Desk 6
7	QLAB - Surround Mid FX L	Desk	Desk 7
8	QLAB - Surround Mid FX R	Desk	Desk 8
9	QLAB - Surround Rear FX L	Desk	Desk 9
10	QLAB - Surround Rear FX R	Desk	Desk 10
11	QLAB – Rehearsal Room L	Desk	Desk 11
12	QLAB – Rehearsal Room R	Desk	Desk 12
13	Laura Boynes Talk Mic	Booth Stage Left	Desk 13 To IEM and Desk 1 and 2 as required during tech
14	Laura Boynes Talk Mic	Booth Stage Left	Desk 13 To IEM and Desk 1 and 2 as required during tech
15	Tim Green Upstage Right	In Grid to be lowered down and unmuted on cue	Desk 13 To IEM
16	Downstage ambient Mic	Under front row seating centre	Desk 5 FOH Centre Main
17	Rehearsal Ambient Mic L	Row B Centre on tall boom	To Desk 13 As required during tech
18	Rehearsal Ambient Mic R	Row B Centre on tall boom	To I Desk 13 as required during tech
19	God Mic	Sound Ops	Desk 13 and Desk 1 and 2 as required during tech

Outputs

Channel	Desk Output	Location
1	Left	FOH L
2	Right	FOH R
3	Upstage FX L	Upstage L
4	Upstage FX R	Upstage R
5	Centre Main	FOH C
6	FOH SUB	Under Seating Bank
7	Surround Mid L	Auditorium Fixed
8	Surround Mid R	Auditorium Fixed
9	Surround Rear L	Auditorium Fixed
10	Surround Rear R	Auditorium Fixed
11	Rehearsal Room L	Rehearsal Room Left – Sum to Top box
12	Rehearsal Room R	Rehearsal Room Right – Sum to Top box
13	IEM	Channel 1 IEM rack – in Grid

Communications

Venue To Provide

Talkback communication for crew / director.

- Stage Manager (FOH Stalls)
- LX Operator (FOH)
- Directors Hut (onstage Stage Left)
- Audio Operator (FOH Stalls)
- 2 x Show Mechanist (Upstage) – wireless preferred

PRODUCTION DESK REQUIREMENTS

From the beginning of load-in until 1 hour prior to the first performance the company requires production desks set up in the auditorium in the centre of the stalls slightly above stage level.

Power, desk lamps and comms are required.

LX Production Desk

Lighting desk client to be installed on Production desk. If client (or monitors) are unavailable then lighting desk will be programmed from production desk. GPO and comms are required. Desk lamp x 1 to be provided.

SND Production Desk

Ethernet infrastructure required to link with SM Desk. If not available an Ethernet cable of sufficient length will be required for screen sharing. GPO, god-mic and 2 x comms are required. Desk lamp x 1 to be provided.

Facilities

Venue To Provide

- 2 x dressing rooms
- 1 x production office
- Access to a first aid kit and access to refrigerated ice packs (not instant ice packs)
- Access to washing and drying facilities
- Access to dedicated toilet for performer/ crew in close proximity to stage with hot and cold running water
- Sufficient lighting, tables, chairs, bins and mirrors
- Access to internet and printing facilities for the production team
- A secure lockable area where computers and valuables can be stored during the run
- Access to fridge, kettle and microwave

Commitment To Environmental Sustainability

Performing Lines has a commitment to environmental sustainability and we ask that the venue undertake the following measures to reduce the carbon footprint of the production

- Turn off all dressing room lights, air conditioning and heating until the arrival of the company
- Turn off all unnecessary stage sound and lighting equipment when the venue is closed or idle
- Provide recycling facilities backstage and in dressing rooms
- Provide reusable crockery, cutlery and glassware in lieu of disposable products
- Please ensure the performer crew has access to tap water and bulk water dispensers. Please provide reusable water bottles for performer and crew.