

ALPD[#]

Professional
Process for
Production
Electricians

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The ALPD Professional Process for Production Electricians

The production electrician is the leading person responsible for the temporary installation of the complex lighting and data networks. They are responsible for realising the lighting design and to liaise with all the other departments regarding their power requirements on the production. The production electrician is the principal liaison with the lighting hire company as well as the manager for the entire lighting crew.

The production electrician works closely with the production manager and lighting designer to ensure they fulfill these responsibilities on time, within budget and to ensure the highest levels safety are adhered to.

This document is intended to explain some of the processes required to fulfil this role at each stage of the production process.

Engagement

Getting a job

The production electrician would be availability checked by either the production manager, the producer or the lighting designer. Until there is a deal memo agreed by the management, the production electrician will not be fully signed up to the project, so it is essential this is done as early as possible.

Contract / Deal memo

- A deal memo or contract should be agreed stating the terms and include the dates, day rates and payment schedules in order to protect both the production electrician and the producer.
- The production electrician will be booked until press night, or an agreed technical freeze date.
- Travel and accommodation requirements, as well as a per diem allowance will be agreed at this stage.

For further information please refer to the ALPD Production Electrician Contract Checklist

Pre-production

The production electrician works closely with the production manager, lighting designer, hire companies, set builders / set electrics companies.

Good decisions at this stage could save costly mistakes nearer opening night and are vital to the production being delivered on time.

Planning and Design

- Discussions with the lighting designer about the lighting designs.
- Draw up a bid list and issue to the relevant hire companies.
- Manage the hire negotiations with numerous hire companies in collaboration with the production manager and lighting designer to reach a deal.
- Work with the designers to ensure the requirements for the set lx are realised.
- Negotiate the bids and manage the relevant build companies for the set lx.
- Negotiate load in schedule with the production manager.
- Work out the staffing levels for the production, find and engage the crew.
- Design the data and network distribution and clarify with the programmer.
- Liaise with other departments addressing their power & data requirements.
- Design the metal work, construction and rigging to realise the lighting design.
- Calculate the weight requirements for the lighting rig in conjunction with the riggers.
- Work out the truck pack.
- Manage the Carnet if required.
- Ensure the lighting design can be achieved in all relevant venues.
- Issue Lightwright and Vectorwork files.
- Attend production meetings and deal with any matters arising in rehearsal.

Pre – Production Prep work

Once these decisions are made time is spent to 'prep' the show which is vital and should not be underestimated in its importance for the delivery of a safe and efficient lighting system.

Power and Data design:

- Power distribution, equipment and location.
- Control system and location.
- Calculate cable power loading and lengths.

Hire company orders:

- Clarify the total amount of lighting equipment required including hanging hardware.
- Clarify all cable requirements the types, lengths and power rating.
- Clarify mains and data networks.
- Design and order custom metal work, storage and travel dollies.
- Finalise colour, gobo, tape and all sales items.
- Order all lighting accessories required for the lighting design and install.

Hire Company Pre-Prep

- Book the hire shop for pre-production.
- Coordinate delivery of equipment from other departments for integration.
- Create cable looming lists for cable management.
- Program addresses to all the equipment.
- Create identification labels for all equipment including fixtures, cables, looms, power and data.

- Discuss orientation and modes of any moving lights with the programmer.
- Keep all records and documentation up to date.

Hire Shop On Site Prep

- Build Lighting Cable looms which might additionally contain sound, video and automation cables.
- DMX address all intelligent equipment.
- Build and populate all rigging including trusses and side towers.
- Load any colour and gobos.
- Add accessories – top hats etc.
- Box up lighting equipment in flight cases for transportation.
- Build control racks
- Set up control system, load show file from programmer.
- Prepare production desk equipment and pack.
- Check everything is correctly labeled.

Production Load-in

The installation of the lighting equipment in the venue can happen over several days or weeks where the whole lighting team are now involved in collaboration with the other departments. Sufficient time should be allowed for this work to be done successfully.

- Rig lighting trusses, bars and lighting positions.
- Hang the lights.
- Run lighting looms to power the equipment.
- Set up mains distribution.
- Set up control systems.
- Test all equipment and rectify any issues.
- Install any set electrics.
- Facilitate the focus sessions with lighting designer and other departments.
- Trouble shoot and respond to changes when necessary.
- Set up production desks including the removal of seats.
- Rig backstage working light requirements.

Technical Rehearsals

Once rehearsals start any further technical work can only happen during rehearsal breaks on stage, so production electricians often take their breaks at other times.

- Continue to react to notes from the creative and production teams.
- Liaise between show staff/creatives and venue staff.
- Make improvements to the lighting and systems to future proof the show
- Ensure that all documentation and labeling is updated.

Previews

The production electrician reacts to notes and adjustments from the evening's performance. Often these notes are delivered post-show to be enacted the following morning and staffing levels should be maintained to accommodate this work.

- Set-up production desks daily ready for technical work to begin.
- React to notes from the lighting designer and creative team.
- Train show staff to operate and maintain the rig.
- Remove production desks ready for the preview performance.

After press night

All shows require aftercare, and this should be covered in the deal memo.

- Providing advice when issues occur.
- On-site technical assistance when required.
- Complete documentation and distribute.
- Co-ordinate crewing for the load out and any further moves.
- Make preparations for load out.