

Overview of role

Reporting to their Head of Department, the Practical Electrician is responsible for designing, building, operating and derigging practicals equipment and onset appliances. They are also responsible for testing and certificating practicals' wiring and providing power to any onset electrical props or appliances that will be seen in vision.

The Practical Electrician in high-end TV and scripted film can also be found in the Art Department. On larger jobs there may be a stand-alone Practicals Department, with a head of department overseeing several Practical Electricians.

Core responsibilities:

These core responsibilities are provided as a guide and are not exhaustive. The exact responsibilities on a particular production will vary depending on the scale and budget band.

<p>1. Design practicals</p> <ul style="list-style-type: none"> • Discuss requirements for practicals with the Art Department and Gaffer • Collate information from departments who will be using the system • Specify cables, safety disconnection devices and plug and socket systems that adhere to the regulations • Calculate that all circuits can carry required loads and all safety devices disconnect within specified regulatory time • Specify any extraneous equipotential bonding requirements or mechanical protection • Create (or adopt) a mutually agreeable labelling system to identify fixed, temporary and dimmed circuits • Obtain copies of venues' EICR certification • Gain permission to modify installed systems • Agree position of practicals feeds with the Gaffer or Best Boy • Follow instructions, lighting plots, patch sheets and manufacturers' specifications taking account of any specialist situations such as water on set • Create a drawing of components and cable runs relative to the plot or floorplan • Document changes and ensure most recent versions are being used
<p>2. Select and check equipment and tools</p> <ul style="list-style-type: none"> • Select specified electrical equipment • Ensure selected electrical items have a formal electrical safety test certificate • Carry out pre-use checks, making sure equipment is serviceable and complete • Report damage, failures and missing parts • Select required hand tools, power tools and metering equipment • Report use of consumables for stock management, billing and reordering • Obtain purchase order number or approval in writing when purchasing consumable items
<p>3. Load vehicles</p> <ul style="list-style-type: none"> • Load vehicles with best weight distribution • Secure loads • Check driver is happy with the load before transport
<p>4. Install practicals equipment</p> <ul style="list-style-type: none"> • Use suitable fixing equipment • Maintain continuity of service by assessing loading options of any systems already in use such as fixed wiring in buildings

<ul style="list-style-type: none"> • Terminate conductors • Check voltage and current conforms with system specifications • Construct custom solutions to create specified looks using flicker sticks, flicker boxes, led ribbon kits, gobos and so on • Supply power and use circuit protection • Manage cables, using signage when required • Label up distribution boxes, cabling and fixtures with the designed labelling system • Ensure ballast and other electronics are kept dry and well-ventilated • Update drawings with circuit numbers and other relevant information • Inform Best Boy or Gaffer of any changes • Brief relevant people on the peculiarities of the rig
5. Provide power to onset electrical props or appliances <ul style="list-style-type: none"> • Liaise with other crew members when required • Provide safe onset power which meets requirements • Ensure electrical appliances and cabling have been tested • Label distribution circuits when required • Inform Gaffer or Genny Operator of significant loads and the addition of final distribution circuits
6. Testing and certificating practicals wiring <ul style="list-style-type: none"> • Use calibrated metering equipment to take readings of continuity, insulation resistance, earth fault loop impedance and residual current device (RCD) operation. • Create BS7909 or BS7671 (EICR) certification where appropriate • Keep copies of certification and share originals with relevant parties • Register certificates with accrediting bodies • Monitor built-in meters or take separate readings to assess voltage and current being drawn, conformity with system specifications and that installation operates as specified • Where changes have been made to installed wiring, reinstate, test and certificate original systems
7. Operate practicals during shooting <ul style="list-style-type: none"> • Make adjustments to practicals as per instructions • Update others on how long this will take • Follow cues and operate practicals • Keep electrical equipment in order • Change batteries when required with minimal disruption to shooting
8. Secure and cover electrical equipment at the end of shooting <ul style="list-style-type: none"> • Leave stand-by equipment in allocated positions • Secure vehicles, machines, and equipment • Partially derig any aspects of equipment that require it
9. Deal with equipment failure <ul style="list-style-type: none"> • Methodically identify faults or reasons for equipment failure • Update others on how long it will take to rectify • Fix faults where possible • Remove faulty equipment from service when faults cannot be fixed • Request and fit replacement equipment or parts when required • Inform supervisor when issue is rectified • Mark up faulty items and include details of the fault to aid the repair
10. Derig practicals equipment <ul style="list-style-type: none"> • Derig practicals equipment in a logical order • Maintain continuity of service when parts of systems will remain in use • Box equipment for return to suppliers when finished with • Double check work area and location for lighting equipment when derigging complete

11. Follow health, safety and welfare requirements

- Work in line with Industry recognised, and production specific health and safety practices
- Dress appropriately and use required personal protective equipment (PPE)
- Familiarise self with latest versions of risk assessment method statements (RAMS)
- Identify team medic and location of hospital from call sheets or signage
- Keep facilities and workstation clean and tidy
- Identify and report any close calls, accidents or breaches to health and safety, rectifying issues to prevent reoccurrence when applicable
- Report any safety items used so they can be replaced
- Follow policies and report any bullying, harassment or mental health issues
- Refer any issues to the supervisor

Role specific skills:

- Designing, building and derigging practicals and onset appliances
- Testing and certificating wiring
- Identifying and isolating faults and completing minor repairs to practicals

Other / Transferable Skills:

- Communication. Liaising with own department about lighting work and following radio etiquette when using the radio
- Organisation. Following call sheets and movement orders, keeping timesheets and preparing and submitting invoices
- Problem-solving. Methodically identifying the causes of faults in equipment
- Securing work. Collating proof of competency and experience, establishing and negotiating rate, and clarifying and approving deal memo and contract
- Driving. Driving production-controlled vehicles, keeping logs of operation and reporting defects and accidents. For relevant road going vehicles using tachographs correctly and downloading data
- Operating Machinery. Operating licenced powered access equipment (IPAF) and mobile elevated work platforms (MEWP)

When a practical electrician is head of a practicals department

- Management. Assigning duties, overseeing work, collating and signing off paperwork, developing departmental systems and enforcing health and safety

Attributes

- Resilience, Enthusiasm and Curiosity - Adapts positively to changing work priorities and patterns, ensuring deadlines continue to be met. Is proactive and explores new ideas and non-standard ways of working which will enhance and deliver the best results for the production
- Productivity - Organises work effectively and achieves required results within deadlines. Demonstrates the drive and energy to get things done in pressurised situations and escalates appropriately when necessary.
- Ethics and Integrity - Honest and principled in all their actions and interactions. They will be respectful and inclusive of others, and meet the ethical requirements of their profession.
- Flexibility - Willing to both listen and respond to changing priorities and working requirements as required, while at all times maintaining high standards in a constantly changing production environment.