

Document Title: Maintenance of Portable and Transportable Electrical

Equipment Policy

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1. Introduction

Portable appliance testing (PAT) is the term used to describe the examination of electrical appliances and equipment to ensure they are safe to use. This can be any tool or device (e.g. electric hand tools, kettles, extension leads), not being part of the fixed electrical installation of a premises. Most electrical safety defects can be found by visual examination, but some may only be found by testing. However, it is essential to understand that visual examination is a necessary part of the process, as some types of defect cannot be detected by testing alone.

2. Employer Responsibilities

This policy will be managed on behalf of Royal Holloway Students' Union (RHSU) by the Assistant Venue Operations manager (Technical & Events). Under the post holder's authority, specified duties may be delegated to other members of competent staff. The Assistant Venue Operations Manager (Technical & Events) has oversight of specialised equipment within Trading Services, and the Facilities Assistant has oversight of all other departments. Both roles are supported by additional competent staff.

Competent staff must possess the relevant technical knowledge and training to enable them to undertake the work safely. Competence will be determined by the Assistant Venue Operations Manager (Technical & Events) and will include:

- i. Experience of working with electricity and a knowledge of the associated hazards
- ii. A knowledge of electrical and related safety standards and the precautions required to avoid danger
- iii. The ability to recognise when it is safe and when it is not safe to continue work with equipment in a variety of situations.

3. Inspections

Establishing the frequency of inspection and testing is determined from the risks arising from the portable electrical equipment. Risk is associated with the frequency of use and conditions in which operation takes place. For example, an office PC will require less frequent testing than a light fixture or monitor speaker that is used in the main venues. Action does, therefore, depend on the equipment, its location and use, and the findings of risk assessments that take into account all relevant factors. Such risk assessments will be conducted by the Assistant Venue Operations Manager (Technical & Events), or a person authorised on their behalf.

PAT tests will be completed every 2 years on all Portable and Transportable Electrical Equipment, records maintained for inspection

Additionally a relatively brief user check can be a very useful part of any electrical maintenance regime, and numerous faults can be found during a simple visual/aural inspection. See **Appendix 1** for guidance on carrying out a **User Check**.

There are two basic tests offered by all PAT units: earth continuity and insulation. Other tests, dependent on the sophistication of the PAT appliance, can include: load, operation, earth leakage and fuse.

Once tested, it is useful to label the equipment with the date of the last inspection and keep a record of the inspection and its results for future reference. The PAT unit itself will also need to be regularly calibrated to ensure that the findings are accurate on each occasion.

Any equipment found to be defective during combined inspection and testing, formal visual inspection, and user checks, will be immediately taken out of service and shall not be used until certified as safe for use by the Assistant Venue Operations Manager (Technical & Events) or a delegated competent person.

4. New / Hired Equipment

Newly purchased / installed electrical equipment will not be subject to formal inspection and testing for the first year, although before being put into first use it will be necessary to undertake user checks. In the event of any signs of damage, the equipment must not be put into use and should be returned to the manufacturer or supplier.

All newly purchased electrical items should be notified to the Assistant Venue Operations Manager (Technical & Events) in order for them to be added to the Portable Appliance Register of Equipment to be subject to formal testing and inspection. Items permanently taken out of service should also be notified to the post holder; they will then be removed from the register.

Any equipment that is hired or borrowed from an external source must be in a safe condition, certified and insured, and would benefit from being checked over by a competent person.

Appendix 1

User Check Guidance

A relatively brief user check can be a very useful part of any electrical maintenance regime, and numerous faults can be found during a simple visual/aural inspection:

- i. Switch off and unplug the equipment before you start any checks.
- ii. Check that the plug is correctly wired, but only if you are competent enough to do so.
- iii. Ensure the fuse is correctly rated by checking the equipment rating plate or instruction book.
- iv. Check that the plug is not damaged and that the cable is properly secured with no internal wires visible.
- v. Check the electrical cable is not damaged and has not been repaired with insulating tape or an unsuitable connector. Any damaged cabling should be replaced by a competent/trained person.
- vi. Check that the outer cover of the equipment is not damaged in a way that will give rise to electrical or mechanical hazards.
- vii. Check for burn marks or staining that suggests the equipment is overheating.
- viii. Position any trailing wires so that they are not a trip hazard and less likely to get damaged.
- ix. Listen for any unusual sounds rattling could indicate a loose part, whilst a whirring noise may suggest that there is a broken fan, which will cause the equipment to overheat.