



Australian Government

Department of Education, Employment and Workplace Relations

CUEAUD01C Repair and maintain vision systems

Revision Number: 1

CUEAUD01C Repair and maintain vision systems

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	<p>This unit describes the skills and knowledge required to perform basic regular maintenance and simple repairs on vision systems.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.</p>
------------------------	---

Application of the Unit

Application of the unit	<p>Technicians working with audio visual equipment in the screen, media and entertainment industries typically apply the skills and knowledge described in this unit. Under the supervision of senior technical staff, they are responsible for basic repairs and maintenance of equipment and facilities needed for a wide range of productions.</p> <p>Complex repairs requiring specific mechanical, electrical or electronic skills are referred to specialist service technicians.</p> <p>This unit has linkages to a range of other vision systems units, and combined training and/or assessment with those units would be appropriate, e.g.:</p> <ul style="list-style-type: none">• CUEAUD02C Prepare, rig, test and modify vision systems• CUEAUD03C Operate vision systems.
--------------------------------	---

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
-----------------------------	--

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
---	--

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Maintain vision systems	<p>1.1. Periodically undertake <i>maintenance</i> work to restore <i>vision systems</i> equipment to optimum working condition</p> <p>1.2. Clean and maintain equipment, cables and <i>accessories</i> in accordance with <i>organisational</i> requirements and maintenance instructions</p> <p>1.3. Check and replace <i>spares and consumables</i> in accordance with organisational requirements and manufacturer instructions</p> <p>1.4. Record or report the status of all components checked, maintained or replaced according to enterprise procedures</p> <p>1.5. Conduct equipment safety checks in accordance with manufacturer instructions and in compliance with the relevant industry and Australian standards</p> <p>1.6. Complete maintenance documentation according to enterprise procedures and provide copies to <i>relevant personnel</i></p>
2. Repair vision systems	<p>2.1. Recognise faults and safely shutdown equipment following manufacturer instructions and organisational procedures</p> <p>2.2. Isolate the fault, using logical fault detection procedures, to specific equipment or parts of the equipment and correctly determine complexity of repair requirements</p> <p>2.3. Conduct simple <i>repairs</i> and label any faulty equipment which cannot be repaired</p> <p>2.4. Refer complex repairs to technical specialists in consultation with relevant personnel</p> <p>2.5. Discuss faults and repair needs with technical specialists and, if appropriate, have technical specialists pilot the repair from a remote location</p> <p>2.6. Complete repair documentation according to organisational procedures and report to relevant personnel as required</p>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- typical maintenance needs and schedules for the range of vision systems in use
- cleaning agents, equipment and techniques for the major types of vision systems
- interpretation of service documentation and manuals
- common repair requirements for the major types of vision systems
- spare parts and sub-assemblies used in vision system repair and maintenance

Required knowledge

- techniques and processes for detecting faults
- connection protocols, connectors and adaptors used with vision systems
- storage and maintenance and specific properties of various recording/playback mediums used in vision systems, eg computer discs, tapes, slides, video, film, servers, RAM chips
- specific occupational health and safety issues and regulations in relation to the repair and maintenance of major types of vision systems

Evidence Guide

EVIDENCE GUIDE	
The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>The following evidence is critical to the judgement of competence in this unit:</p> <ul style="list-style-type: none"> • ability to correctly use repair and maintenance techniques on multiple pieces of vision systems • correct selection and use of tools • application of logical fault detection procedures • correct interpretation of service and technical manuals • knowledge of occupational health and safety principles, issues in relation to the major types of vision systems.
Context of and specific resources for assessment	<p>The assessment context must provide for:</p> <ul style="list-style-type: none"> • demonstration of skills within an environment which has a range of operational equipment on which the candidate can work, including sound, lighting and projection items • completion of fault detection, repair and maintenance tasks within typical workplace time constraints.
Method of assessment	<p>Assessment may incorporate a range of methods to assess practical skills and the application of essential underpinning knowledge, and might include:</p> <ul style="list-style-type: none"> • direct observation of maintenance and repair tasks conducted by the candidate • inspection of items repaired or maintained by the candidate • review of repair reports prepared by the candidate • written or oral questioning to test knowledge of typical vision systems and occupational health and safety issues and regulations • review of portfolios of evidence and third party workplace reports of on-the job performance by the candidate. <p>Assessment methods should closely reflect workplace</p>

EVIDENCE GUIDE	
	demands and the needs of particular groups (e.g. people with disabilities, and people who may have literacy or numeracy difficulties such as speakers of languages other than English, remote communities and those with interrupted schooling).
Guidance information for assessment	<p>Assessment of this unit requires access to:</p> <ul style="list-style-type: none">• a range of industry current vision systems• a venue where maintenance and repairs can be completed• the tools required to complete repair and maintenance tasks.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><i>Maintenance</i> of equipment may include:</p>	<ul style="list-style-type: none"> • alignment/adjustment of playback equipment • checking all cords and cables are in good condition with insulation intact • checking and replacing globes • checking and storing of audiovisual materials and copying materials • checking controls units, focus, slide trays • checking locking and clamping mechanisms are in good order • checking, cleaning and simple repairs to screens • cleaning heads on recorders/playback units • cleaning lenses • cleaning microphones and replacing inserts • dusting and cleaning exteriors and interiors of all types of vision systems • preparing backup copies of materials • replacing consumables or readily exchangeable parts, e.g. globes, batteries, gels, filters, screens, lenses • testing and replacing batteries
<p><i>Vision systems</i> may be used in a range of environments, including:</p>	<ul style="list-style-type: none"> • attractions and theme parks • auditoria and classrooms • clubs • events • festivals • film locations • hotels • live theatre, front or back of house • meeting and conference facilities • outdoor venues • outside broadcasts • shopping centres

RANGE STATEMENT	
	<ul style="list-style-type: none"> • showgrounds • studio
<i>Accessories</i> may include:	<ul style="list-style-type: none"> • camera controls • camera pedestals • chains and other rigging (within scope of licensing requirements) • curtaining • masking • mounting brackets • rostrums/lecterns • stands • trolleys • truss
<i>Organisational</i> procedures associated with repairing vision systems may include:	<ul style="list-style-type: none"> • documenting repairs • using particular specialists for major repairs • writing and attaching labels to faulty equipment
<i>Spares and consumables</i> may include:	<ul style="list-style-type: none"> • batteries • cables • connectors • filters • gels • globes • lenses • screens
<i>Relevant personnel</i> may include:	<ul style="list-style-type: none"> • clients • designers • directors • editors • graphic artists • head of departments • photographers • sound engineers • staging or lighting crew • supervisors • technical director • other specialist staff
Minor <i>repairs</i> may include:	<ul style="list-style-type: none"> • any instance where a faulty item can be removed and replaced simply and tagged without specific electric or electronic skills

RANGE STATEMENT

	<ul style="list-style-type: none"> • changing and testing faulty control systems, mixers, patch bays, cables, remote units, speakers, projectors • changing blown globes • exchanging parts of equipment (cables, lenses, trays, microphones, sound recording and playback equipment) • replacing faders • replacing fuses • replacing parts of microphone stands • replacing sound equipment connectors
--	---

Unit Sector(s)

Unit sector	
--------------------	--

Competency field

Competency field	Media and entertainment production - vision systems
-------------------------	---

Co-requisite units

Co-requisite units		