



Australian Government

Department of Education, Employment and Workplace Relations

CUELGT05B Record and operate standard lighting cues

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit describes the skills and knowledge required to operate a lighting console through plotting and modifying standard lighting cues and then operating them in performance. This unit assumes that the set up of the lighting console and the operation of the more complex cues, and working with advanced equipment, will be undertaken by more senior lighting personnel.

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Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

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Element	Performance Criteria
1 Record, modify and replay lighting cues	1.1 Correctly identify the functions of controls on the console, including function of the unit displaying data and controls to produce text 1.2 Correctly undertake channel selection and intensity setting, identify on display unit and make appropriate modifications using all relevant controls 1.3 Accurately record cue number and fade/wait times, identify on display unit and make appropriate modifications using all relevant controls 1.4 Play recorded cues in correct sequence and time using all relevant controls correctly, and identify on display unit 1.5 Create, modify and replay group and sub-groups in correct sequence and time using all relevant controls correctly and identify on display unit
2 Carry out procedures prior to plotting or operating lighting cues	2.1 Ensure that working area is clear, tidy, properly illuminated, and relevant written instructions are to hand 2.2 Check communications equipment and ensure that it is in working order 2.3 Power up dimmers, control desk and peripherals using safe working practices and check that operating environment is within manufacturer parameters 2.4 Test lighting instruments, accessories and other lighting elements to ensure all items are in correct working order 2.5 Test venue audience, decorative, safety, and working lighting to ensure all items are in correct working order 2.6 Identify problems with equipment promptly and take appropriate action, or refer to appropriate

personnel as required.

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| 3 | Plot and operate lighting cues | 3.1 Check instructions to verify practicality before plotting and repeat once plotted |
| | | 3.2 Test line of sight needed for visual cues for feasibility during performance |
| | | 3.3 Action cues without delay in accordance with directions and production requirements |
| | | 3.4 Complete cue modifications in accordance with instruction and accurately update appropriate documentation |
| | | 3.5 Establish suitable back-up lighting states in the event of the failure of those recorded |
| | | 3.6 Store recorded lighting cues and other data electronically on device external to main lighting console |
| | | 3.7 Identify and rectify problems safely and in accordance with venue procedures, or refer to appropriate personnel |
| 4 | Carry out basic troubleshooting procedures | 4.1 Correctly identify the nature of faults and locate promptly |
| | | 4.2 Assess the need for remedial action taking consideration of safety issues and the need for uninterrupted performance |
| | | 4.3 Correctly follow manufacturer diagnostic and remedial procedures in accordance with organisational policy |
| | | 4.4 Report fault to appropriate personnel if fault cannot be immediately rectified, providing all relevant information |
| | | 4.5 Liaise with appropriate personnel to identify back-up alternatives if fault cannot be rectified before next production deadline |
| 5 | Carry out post-performance procedures | 5.1 Correctly power down equipment or set to standby between performances as required |
| | | 5.2 Store and/or cover control in accordance with organisational procedures |

- 5.3 Make accurate changes to documentation and file in accordance with organisation procedures

Required Skills and Knowledge

Not applicable.

Evidence Guide

Underpinning skills and knowledge

Assessment must include evidence of the following knowledge and skills:

- knowledge of general lighting terms, including how terms may vary between different systems or how different terms can refer to the same functions on different systems
- knowledge of lighting control concepts used in various lighting systems
- industry terminology and protocols particularly in relation to the operation of lighting
- knowledge of the main types of lanterns, including profile, Fresnel, PC, flood, and PAR lamps, their uses and operations (optical and mechanical) and accessories
- understanding of the basic elements of lighting design
- problem-solving techniques particularly in relation to lighting console operation
- documentation and back-up systems used in conjunction with lighting control
- colour recognition in display equipment
- communication skills to allow for effective collaboration with other technicians and designers
- numeracy skills sufficient to complete simple mathematical calculations and recall numbers for channel selection
- literacy skills sufficient to interpret production documentation.

Linkages to other units

It is strongly recommended that this unit be assessed with or after the following unit:

CUELGT09A - Apply a general knowledge of lighting to work activities

This unit also has linkages to a range of other lighting units, and combined assessment and or training with those units may be appropriate.

Critical aspects of evidence

The following evidence is critical to the judgement of competence in this unit:

- ability to accurately record and reproduce lighting cues to instruction in a given timeframe
- knowledge of lighting terminology.

Method and context of assessment

The assessment context must provide for:

- practical demonstration of skills through the use of a lighting console on multiple occasions for multiple productions
- use of industry-current equipment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- direct observation of the candidate operating a lighting console during production
- direct observation of the lighting effects produced by the candidate during a production
- oral or written questioning to assess knowledge of console features and functions
- review of portfolios of evidence and third party workplace reports on on-the-job performance by the candidate.

Assessment methods should closely reflect workplace 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).

Resource requirements

Assessment of this unit requires access to:

- a range of lighting equipment as identified in the Range Statement

a production and production venue.

Key competencies in this unit

Key competencies are built into all workplace competencies. The table below describes those applicable to this unit. Trainers and assessors should ensure that they are addressed in training and assessment.

Level 1 = Perform

Level 2 = Administer and Manage

Level 3 = Design and Evaluate

Collecting, organising and analysing information (1)

Collecting information needed to record a series of lighting cues.

Communicating ideas and information (1)

Reporting problems with lighting console.

Planning and organising activities (1)

Organising work space.

Working with others and in teams (1)

Liaising with other technicians.

Using mathematical ideas and techniques (1)

Using numbered channels.

Solving problems (1)

Identifying problems during performance.

Using technology (1)

Using lighting console features.

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knowledge of lighting control concepts used in various lighting systems

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understanding of the basic elements of lighting design

problem-solving techniques particularly in relation to lighting console operation

documentation and back-up systems used in conjunction with lighting control

colour recognition in display equipment

communication skills to allow for effective collaboration with other technicians and designers

numeracy skills sufficient to complete simple mathematical calculations and recall numbers for channel selection

literacy skills sufficient to interpret production documentation.

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Reporting problems with lighting console.

Planning and organising activities (1)

Organising work space.

Working with others and in teams (1)

Liaising with other technicians.

Using mathematical ideas and techniques (1)

Using numbered channels.

Solving problems (1)

Identifying problems during performance.

Using technology (1)

Using lighting console features.

Range Statement

The following explanations identify how this unit may be applied in different workplaces, sectors and circumstances.

Venue lights may include:

blue light
work lights
house lights
aisle lights
orchestra lights
display/advertising lights
task light
panic lights
cleaners lights
general lights.

Lighting instruments must include:

theatre-based units.

Lighting instruments may include:

special effects units
digital moving lights.

Other lighting elements may include:

pracs
electrical/electronic props
special effects such as:
strobes
mirrorballs and motors
smoke machines
fog machines
ultraviolet light
chasers
haze machines
effects projectors.

Control desks must include:

manual desks
manual/memory desks.

Control desks may include:

controlled lighting effects.

Control desk peripherals must include:

desk lamps
control cables.

Control desk peripherals may include:

monitors
printers
riggers controls
effects units
backup units.

Dimmers may include:

analogue dimmers

multiplexed digital dimmers
multiplexed analogue dimmers
single unit (follow spot) dimmers, e.g. Model 1 or Monopak
small self-contained dimmable controllers, e.g.. Fourpack, Quadpak.

Appropriate personnel may include:

supervisor
head of department
designer
director
stage manager
other specialist staff.

Testing the control system must include ensuring that:

all operational controls on the lighting board function properly
all dimmer channels are functioning properly
all peripherals are functioning properly
any riggers or designer controls are functioning properly
there is a valid DMX line/signal.

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Unit Sector(s)

Not applicable.