



Australian Government

Department of Education, Employment and Workplace Relations

CUESOU08B Select and manage microphone and other audio input sources

Revision Number: 1

CUESOU08B Select and manage microphone and other audio input sources

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the skills and knowledge required to select and manage audio input sources and the audio signals these devices create. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.
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Application of the Unit

Application of the unit	<p>People working as sound technicians apply the skills and knowledge described in this unit. They are working at a senior level since they are responsible for creating and implementing complex microphone plots. As such it requires a detailed knowledge of microphone and input source technology.</p> <p>The work often involves long or irregular hours and can be physically demanding. The ability to work cooperatively as part of a production team is essential.</p> <p>It is strongly recommended that this unit be assessed with or after the following unit:</p> <ul style="list-style-type: none"> • CUESOU07B Apply a general knowledge of audio to work activities. <p>This unit also has linkages to other audio units and combined assessment/training with those units may be appropriate, e.g.:</p> <ul style="list-style-type: none"> • CUSSOU303A Set up and disassemble audio equipment • CUESOU04C Mix live audio.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Select microphones and other input sources according to application	1.1. Analyse performance outline and liaise with relevant colleagues to determine audio requirements 1.2. Assess the venue/location to determine input source options based on acoustic analysis and any physical limitations 1.3. Assess the <i>acoustic source</i> of the audio to identify the preferred microphone placement 1.4. Identify and select the most appropriate <i>microphone options</i> , including consideration of <i>microphones for specific purposes</i>
2. Maximise gain on stage	2.1. Electrically connect and mechanically set microphones in a desired location using safe work practices 2.2. Position microphone appropriately to achieve required gain 2.3. Implement appropriate <i>equalisation options</i> and introduce relevant effects equipment to increase gain before feedback
3. Manage inputs	3.1. Prepare and implement an appropriate microphone plot 3.2. Patch microphone signals to the audio mixing desk, including multiple signals where required 3.3. Prepare and maintain an input signal failure plan 3.4. Test input sources, identify any problems promptly and take action to rectify as appropriate

Required Skills and Knowledge

Required skills

- current trends in microphone development and the availability of products
- terminology associated with input source management

Required knowledge

- detailed knowledge of different types of microphone and their applications, including different audio pick-up patterns, microphone behaviour in different environments, acoustic consequences of signal phase problems, the use of phantom power
- microphone requirements for different types of environment, including live sound, studio recording and live broadcast
- techniques for preparation of a microphone plot, including key elements and relevant issues for consideration
- techniques for preparation of an input signal failure plan, including key elements and issues for consideration
- techniques for management of diverse input signal types, including limitations

Evidence Guide

EVIDENCE GUIDE	
<p>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.</p>	
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"> • in-depth knowledge of microphone technology and product options sufficient to complete a complex set-up • ability to select, set-up and test a microphone plot.
Context of and specific resources for assessment	<p>The assessment context must provide for:</p> <ul style="list-style-type: none"> • practical demonstration of skills through the selection and set-up of a complex microphone plot for more than one production/event • involvement of and interaction with a production/performance team • use of industry-current equipment.
Method of assessment	<p>Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:</p> <ul style="list-style-type: none"> • evaluation of the audio aspects of an event where the candidate has been responsible for microphone selection and set-up • evaluation of a microphone plot prepared for a specific purpose by the candidate • oral or written questioning to assess knowledge of microphone technology • 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 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).</p>

EVIDENCE GUIDE**Guidance information for assessment**

Assessment of this unit requires access to:

- a range of industry-current microphones of different types
- other audio equipment such as mixing console
- venue/location for staging of production/event.

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.

Acoustic sources may include:

- acoustic instruments
- electric instruments
- the voice for dramatic dialogue
- the voice for lectures and meetings
- the voice for music

Microphone options may include:

- condenser
- dynamic

Microphones for specific purposes may include:

- lectern
- specific instruments, e.g. piano, electric guitar
- stage dialogue

Equalisation options and effects equipment to achieve maximum gain before feedback may include:

- feedback eliminator style device
- one third octave equaliser
- parametric equaliser

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Media and entertainment production - audio/sound
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Co-requisite units

Co-requisite units		