



Australian Government

CUASOU401 Mix live audio

Release: 2

CUASOU401 Mix live audio

Modification History

Release	Comments
Release 2	This version released with CUA Creative Arts and Culture Training Package version 2.0. Updated assessment conditions section. Updated modification history section to reflect changed name of training package.
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 1.0.

Application

This unit describes the performance outcomes, skills and knowledge required to mix audio for live shows in the screen, media, entertainment and events industries.

Individuals who apply these skills work autonomously in a team environment as they take responsibility for the front of house mix, which involves creating quality sound for audiences. They may also be responsible for supervising others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Media and entertainment production - audio/sound

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for live audio mixing	1.1 Review production documentation and confirm scope of audio mixing requirements with relevant personnel 1.2 Ensure that audio equipment is set up and operational in line with production requirements 1.3 Anticipate problems that could arise during shows and plan accordingly
2. Undertake pre-show	2.1 Match interfaces between audio and destination in accordance

operations	with level, impedance, phase and frequency 2.2 Line check all inputs and outputs for continuity and patching and route test signals to correct signal paths 2.3 Perform time and phase alignment of audio equipment and adjust as required 2.4 Check that audio levels and controls meet acoustic and dynamic requirements 2.5 Take action to ensure that faults and problems identified during testing are rectified promptly 2.6 Complete audio check and document changes according to organisational requirements 2.7 Operate front of house and monitor consoles during dress rehearsals or sound checks to establish appropriate mix to produce the required technical level, tonal balances and frequency response 2.8 Discuss audio issues with relevant personnel during rehearsals and adjust mix as required
3. Mix audio sources for live shows	3.1 Manage signal control of level, equalisation and dynamic parameters to achieve a balanced sound mix 3.2 Apply effects according to production requirements 3.3 Produce transitions between sound signals that are technically accurate and produce the required effect 3.4 Ensure that the level of the composite signal is within technical limits and desired dynamic range 3.5 Observe and manage sound pressure levels according to venue requirements and safe noise levels 3.6 Resolve audio operational problems with minimal disruption to performances
4. Complete post-show operations	4.1 Execute power down and disassemble equipment safely 4.2 Pack and store equipment and accessories according to safety regulations and production requirements 4.3 Clean work environment after use and restore environment to original condition 4.4 Contribute to evaluations of productions and implement recommendations aimed at improving overall effectiveness of audio operations 4.5 Seek feedback from relevant personnel on own work performance and note areas for improvement

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	4.5	Seeks the views and opinions of others to improve work performance
Reading	1.1	Interprets production documentation in relation to own duties
Writing	2.6	Prepares and updates workplace documentation
Oral communication	1.1, 2.5, 2.7, 2.8, 3.6, 4.4, 4.5	- Obtains information by listening and questioning - Discusses ideas and solutions in relation to audio operations
Numeracy	2.3, 2.4	Uses numerical features of audio desks
Navigate the world of work	1.2, 2.6, 3.2, 3.3, 3.5, 3.6, 4.1, 4.2, 4.3, 4.4	- Follows workplace protocols and safety procedures - Complies with organisational requirements in relation to noise levels - Demonstrates a commitment to improving job performance by contributing to evaluations of audio operations
Interact with others	1.1, 2.5, 2.7, 2.8, 3.6, 4.4, 4.5	- Works collaboratively to determine and complete requirements - Follows accepted communication practices and protocols
Get the work done	1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.3	- Adopts a methodical and logical approach to live audio mixing duties - Plans for contingencies - Recognises and takes responsibility for addressing predictable, and some less predictable, problems that arise in audio operations - Meets work deadlines - Operates the full range of features of professional audio equipment - Uses standard word processing and spreadsheet applications to update audio documentation

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUASOU401 Mix live audio (Release 2)	CUASOU401 Mix live audio (Release 1)	Updated assessment conditions section. Updated modification history section to reflect changed name of training package.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUASOU401 Mix live audio

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Performance Evidence

Evidence of the ability to:

- mix live audio for at least two performances or productions in line with production requirements
- mix live audio using both analogue and digital mixing desks
- work collaboratively.

Note: If a specific volume or frequency is not stated, then evidence must be provided for each of the above points at least once.

Knowledge Evidence

To complete the unit requirements the individual must:

- explain the features and mixing capabilities of a range of analogue and digital front of house consoles
- explain how the matrix and main outputs of consoles are used
- explain how signal processing options can be used for troubleshooting and for creative effects
- describe techniques for adding and patching sub-mixers into sound systems
- describe how the following apply when mixing live audio:
 - automation and cue delivery
 - contemporary audio effectors and digital system processing (DSP) effects
 - SMPTE time code and musical instrument digital interface (MIDI) to fire cues and automation
 - voltage control amplifier (VCA) masters.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to equipment and accessories used to mix live audio.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

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