



Australian Government

CUASOU403 Manage audio system control networks

Release: 2

CUASOU403 Manage audio system control networks

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 set up a basic data network for remote control and distribution of digital system processing (DSP) audio in the screen, media, entertainment and events industries.

Individuals who apply these skills work autonomously in a team environment as they take responsibility for setting up and monitoring audio system control networks, such as remote control systems for amplifiers and proprietary DSP control systems where functions can be assigned remotely.

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. Determine audio network requirements	1.1 Establish system requirements in consultation with relevant personnel and with reference to production documentation 1.2 Investigate available system resources and determine capabilities 1.3 Draw accurate system flow charts with all components in

	correct order 1.4 Allocate audio stage boxes where analogue audio is required 1.5 Determine audio schedules and allow for pre-set system configurations and dynamic system changes 1.6 Discuss and finalise plans for audio system control networks that meet production requirements and timelines
2. Test and commission network	2.1 Assemble hardware components and network topography according to system needs and safety procedures 2.2 Complete interface with analogue audio as required 2.3 Test network topography and resources to ensure correct functioning 2.4 Commission analogue audio components appropriately 2.5 Activate and implement all DSP system pre-sets
3. Monitor network	3.1 Crosscheck performance of amplifiers and loudspeakers according to DSP system assignments 3.2 Apply knowledge of data interfacing and protocols to work activities 3.3 Identify problems with network, then take appropriate action or report to relevant colleagues as required 3.4 In consultation with relevant personnel, evaluate effectiveness of audio network operations and note areas for future 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
Reading	1.1, 1.2	Obtains information from a range of written sources
Writing	1.3, 3.4	- Prepares and updates workplace documentation - Documents outcomes of evaluations
Oral communication	1.1, 1.5, 1.6, 3.3, 3.4	- Obtains information by listening and questioning - Discusses ideas and solutions in relation to audio operations

Numeracy	2.3, 2.5	• Uses numerical features of audio equipment
Navigate the world of work	1.1, 1.3, 1.6, 2.1, 3.3, 3.4	• Follows workplace protocols and safety procedures • Meets work deadlines • Demonstrates a commitment to improving own work performance through contributing to evaluations of audio network operations
Interact with others	1.1, 1.5, 1.6, 3.3, 3.4	• Works collaboratively to confirm requirements and complete tasks • Follows accepted communication practices and protocols
Get the work done	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3	• Adopts a methodical and logical approach to establishing, testing and monitoring audio system control networks • Assesses information about audio system control networks and devises the most effective way to meet audio network requirements for productions • Recognises and takes responsibility for addressing predictable, and some less predictable, problems that arise in audio operations • Applies knowledge of audio concepts and principles to the management of audio system control networks • Controls wiring and audio routing options for distributed audio control systems • Uses standard word processing and spreadsheet applications to prepare audio production documentation

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUASOU403 Manage audio system control networks (Release 2)	CUASOU403 Manage audio system control networks (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 CUASOU403 Manage audio system control networks

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Performance Evidence

Evidence of the ability to:

- configure and manage audio networks to meet production requirements on at least two occasions
- 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 function of musical instrument digital interface (MIDI), SMPTE and show-based protocols and control mediums
- describe the main features of systems used to control audio
- explain terminology and definitions for digital systems and network control
- explain how cues relate to control networks
- explain the difference between analogue and digital forms of control and switching
- explain the following concepts and procedures associated with data interfacing:
 - basic network protocols
 - communications
 - error correction
 - interfacing with common computer operating systems
 - network distribution

- network topologies
- transmission
- explain how digital signal processing applies in control systems
- describe proprietary audio transmission protocols and other kinds of full bandwidth audio transmission topologies.

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:

- audio networking devices
- a venue in which audio can be networked.

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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