



Australian Government

CUASOU414 Manage wireless audio operations

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package Version 5.0.

Application

This unit describes the performance outcomes, skills and knowledge required to specify, fit and operate radio microphones and in-ear wireless monitors for performers in the screen, media, entertainment and events industries.

The unit applies to those who work autonomously in a team environment as they take responsibility for managing frequency spectrum and overseeing the use of a range of wireless audio equipment during productions. 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

ELEMENT	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 wireless audio operations	1.1 Identify factors impacting operation of wireless audio equipment in consultation with required personnel and with reference to production documentation 1.2 Identify technical, performance and regulatory requirements for using wireless audio equipment 1.3 Document wireless audio equipment requirements prior to production and in required format 1.4 Confirm availability of equipment and accessories according to production requirements
2. Set up wireless equipment	2.1 Establish suitable location for equipment and technician work area in consultation with required personnel

ELEMENT	PERFORMANCE CRITERIA
	2.2 Run audio lines from wireless equipment to stage box or patch point and make connections according to plot 2.3 Run standby microphone cables as required, and have wired and wireless standby equipment on hand 2.4 Identify wireless frequencies in use within range 2.5 Identify wireless instrument and in-ear monitor frequencies for use by performers and musicians associated with performances 2.6 Plot proposed and currently used frequencies and compare with legal and available frequencies 2.7 Allocate frequencies to people or departments as required 2.8 Prepare required documentation where multiple use of same frequency for different performers or segments is required 2.9 Establish backup channels with required personnel and set up other contingency management measures
3. Fit wireless audio equipment	3.1 Confirm wireless audio equipment meets labelling and working requirements prior to fitting 3.2 Confirm frequency setting on microphones and transmitters matches and complete tuning 3.3 Identify required position for equipment based on performance and technical issues 3.4 Fit radio microphones and transmitter packs to performers using attachment techniques 3.5 Explain technical operation issues to performers 3.6 Review and adapt gain structure to meet production requirements
4. Monitor wireless audio equipment systems	4.1 Confirm wireless audio equipment signal is received by sound desks 4.2 Confirm and crosscheck equipment is working with performers 4.3 Identify problems and take required action to rectify as required
5. Complete work operations	5.1 Retrieve wireless equipment from performers 5.2 Clean and arrange or store wireless equipment for next user or performance 5.3 Evaluate effectiveness of wireless operations and note areas for future improvement in consultation with required personnel

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Learning	• Determines how to meet wireless audio requirements using information on wireless audio technology
Numeracy	• Allocates frequencies for wireless audio equipment
Oral communication	• Obtains information by listening and questioning • Contributes information and expresses requirements using clear language • Discusses ideas and solutions in relation to audio operations
Reading	• Obtains information from different written sources
Writing	• Prepares and updates workplace documentation using language required for intended audience
Teamwork	• Determines requirements and completes tasks in collaboration with others
Initiative and enterprise	• Meets work deadlines • Organises and operates radio microphones and transmitter packs using knowledge of wireless audio concepts and principles • Manages wireless and audio operations using methodical and logical approach
Planning and organising	• Plans for contingencies
Problem solving	• Recognises and takes responsibility for addressing problems during audio operations
Self-management	• Follows workplace protocols and safety procedures • Fits radio microphones and in-ear wireless monitors to performers according to required protocols and privacy requirements
Technology	• Uses required software applications to prepare production documentation

Unit Mapping Information

Supersedes and is not equivalent to CUASOU404 Manage wireless audio operations.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for CUASOU414 Manage wireless audio operations

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- operate wireless audio systems on two different occasions according to production requirements.

In the course of the above, the candidate must:

- apply knowledge of regulatory and technical issues affecting use of wireless audio technologies
- determine how to use wireless audio technology according to production requirements
- identify and respond to problems relating to wireless audio equipment system
- work collaboratively with performers and others involved in productions
- meet privacy protocols when working with performers and fitting wireless equipment.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- key factors, purpose and procedures relating to industry terminology:
 - wireless and sound technologies
 - audio consoles
 - digital signal processing
 - cable rolling
 - internet protocol (IP) networking
 - signal flow operation and delivery
- performance factors impacting use of wireless audio technology
- care and management of a range of rechargeable battery types
- procedures for using different types of wireless audio equipment in different production contexts

- how common frequencies used with wireless audio equipment may be reserved or affected by local television or radio transmitters
- features of different antennae and how they are used in wireless audio operations
- techniques and protocols for fitting radio equipment to performers
- Australian Communications and Media Authority (ACMA) requirements for allocating frequencies for wireless audio equipment
- procedures for establishing different practical and available channels at given location
- safety requirements for use of wireless audio equipment
- how to address common issues and challenges of managing wireless audio operations.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- radio microphones and/or in-ear monitors, transmitters and receivers
- venue where productions that require wireless audio technology can be held.

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

Links

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