

1. Module details

Module name

Video Systems Installation

Module duration

It is expected that students with the appropriate entry knowledge and skills will successfully complete this module in 36 to 40 hours.

Module code

NUE413

Discipline code

0703230

2. Module purpose

This module aims to provide students with the knowledge and skills to undertake the appropriate methods required correctly set up and install a wide range of commercially available consumer entertainment systems.

3. Prerequisites

Applied Electricity 1 NUE052

4. Relationship to competency standards

This module provides part of the underpinning knowledge and skills in the 'Evidence Guide' of specific units of competency in the National Electrotechnology Training Package and provides similar support, where mapped, to equivalent units in the National Metals and Engineering Competency Standards. For details refer to the module to unit maps, available from EE-Oz Training Standards.

5. Content

Receivers

Installation

Setup

Operation

Antenna systems

Antenna selection

Satellite

Terrestrial

Cable

PVR, STB, Cable modems, MHP

Digital Versatile Disc Machines (DVD)

Installation

Set up

Operation

Consumer Entertainment Systems

Installation

Set up

Operation

Remote Control Units

Operation

	Multi-function units
	Consumer Entertainment Products Interoperability Interfacing Interference System clashes Audio level matching Video terminations
	Routing and segregation of cables
6. Assessment strategy	
Assessment methods	Assessment should be progressive reflecting a holistic approach to ensure the module purpose is met. To assist in ensuring validity, reliability and fairness assessment instruments should include practical exercises, assignments and written tests consisting of a number of item types, such as multiple choice, short answer and problem solving.
Conditions of assessment	Learning and assessment will take place in an environment that is conducive to a learner's development.
7. Learning outcome details	
Learning outcome 1	Demonstrate the ability to correctly install and set up digital television reception equipment.
Assessment criteria	<ol style="list-style-type: none">1.1 Identify and select the correct hardware to receive digital television signals from a satellite, terrestrial transmission or cable signal source.1.2 Compile a parts list of all ancillary hardware required to perform an installation at a customer's premises.1.3 Install appropriate hardware to receive digital television signals from a satellite, terrestrial transmission or cable signal source.1.4 Identify and select the correct cables, hardware, fittings and fixtures to correctly install and connect a digital television reception device to an antenna, satellite dish, or cable signal source.1.5 Demonstrate correct terminations in RF video and audio connections.1.6 Correctly set up menu driven digital television reception devices.1.7 Demonstrate the correct operating procedures for the unit to an end user client.

Learning outcome 2	Demonstrate the ability to correctly install and set up Digital Versatile Disc (DVD) machines.
Assessment criteria	<ul style="list-style-type: none">2.1 Describe the correct procedure for the installation and set up of a range of Digital Versatile Disc (DVD) machines.2.2 Correctly set up and operate a range of DVD machines.2.3 Demonstrate the correct operating procedures for the unit to an end user client.
Learning outcome 3	Demonstrate the knowledge and skills required to install set up and operate consumer entertainment systems.
Assessment criteria	<ul style="list-style-type: none">3.1 Specify typical requirements of speaker location and unit positioning in a client's premises.3.2 Explain the effects on operation of incorrect positioning of surround sound system speakers.3.3 Describe the correct procedure for the installation and set up of a range of consumer entertainment systems.3.4 Correctly set up and operate a range of consumer entertainment systems.3.5 Interpret the requirements of a manufacturer's installation manual.3.6 Use a troubleshooting guide from a manufacturer's installation manual.3.7 Demonstrate the correct operating procedures for the unit to an end user client.
Learning outcome 4	Identify the operating requirements of remote control units.
Assessment criteria	<ul style="list-style-type: none">4.1 List typical types of remote control units.4.2 Demonstrate the use of typical remote control units.4.3 Describe the operation of multi -function remote control units.4.4 Demonstrate the correct operating procedures for a range of remote control units to an end user client.
Learning outcome 5	Demonstrate the knowledge and skills required to ensure interoperability between consumer entertainment units.
Assessment criteria	<ul style="list-style-type: none">5.1 Identify typical interconnection problems in consumer entertainment systems.5.2 Identify effects of poor routing and segregation between a variety of wires and cables

8. Delivery of the module

Delivery strategy

- 5.3 Interpret and rectify incorrect interconnection and set up of malfunctioning consumer entertainment systems.
- 5.4 Demonstrate the correct method of interfacing a range of 'stand alone' consumer entertainment products.
- 5.5 Perform operational testing after installation and interconnection of consumer entertainment units.

Delivery strategies must be suitable for learning both theoretical and practical aspects described in the module purpose. It is considered that the most effective method to achieve this is by integration of theory and practice where students learn by experimentation, research and reports. It is recommended that learning and assessment be facilitated in a holistic manner that may require learning outcome sequence other than that indicated in the module. Persons working in this type of domestic installation environment may require a CPR Restricted registration in some cases. If so they should seek further training in this area to satisfy this requirement.

Resource requirements

Resources should be sufficient for students to carry out learning activities on an individual basis.

Suggested Learning Resource:

A range of representative commercially available consumer entertainment systems such that an array of methods required correctly set up and install can be demonstrated by the learner.

Where this module is used in an approved Traineeship or Apprenticeship program learners should be advised to obtain, where available, respective EE-Oz Training Standards¹ *User Guides* (these outline in detail what training and work performance the Learner is required to undertake for the program).

Occupational health and safety requirements

A safe and healthy environment will be provided for students and teachers as well as the particular safety procedures followed as part of the learning / teaching activity and content.

¹ EEQSBA – ElectroComms and EnergyUtilities Qualifications Standards Body of Australia Ltd trading as EE-Oz Training Standards (www.ee-oz.com.au)