

CAREER GUIDE FOR AUDIO AND VIDEO EQUIPMENT TECHNICIAN

SOC Code: 27-4011

Pay Band(s): 3 and 4 ([Salary Structure](#))

Standard Occupational Description: Set up or set up and operate audio and video equipment including microphones, sound speakers, video screens, projectors, video monitors, recording equipment, connecting wires and cables, sound and mixing boards, and related electronic equipment for concerts, sports events, classrooms/lectures, meetings and conventions, presentations, and news conferences. May also set up and operate associated spotlights and other custom lighting systems.

Audio and Video Equipment Technician positions in the Commonwealth are assigned to the following Roles in the [Media and Production Services Career Group](#):

[Media Specialist II](#)

[Media Specialist III](#)

While Audio and Video Equipment Technicians within the Commonwealth are all located within the Media and Production Services Career Group, individuals may want to pursue other opportunities within the Commonwealth depending upon individual training, education, knowledge, skills, abilities, and interests.

Other Career Group(s) that may be of interest are:

[Electronics](#)

[Equipment Service and Repair](#)

[Engineering Technology](#)

[Information Technology](#)

[Computer Operations](#)

[Training and Instruction](#)

SKILLS, KNOWLEDGE, ABILITIES AND TASKS

(Technical and Functional Expertise)

Skills

Note: *The technical and functional skills listed below are based on general occupational qualifications for Audio and Video Equipment Technicians commonly recognized by most employers. Typically, you will not be required to have all of the skills listed to be a successful performer. Recruitment and selection standards for an individual state job must be based on the specific knowledge, skills, and abilities for that job as indicated in the job announcement and job description in the Employee Work Profile.*

1. Communicating effectively in writing as appropriate for the needs of the audience.
2. Talking to others to convey information effectively.
3. Understanding written sentences and paragraphs in work related documents.
4. Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
5. Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

6. Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new concepts, processes, procedures or equipment usage.
7. Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
8. Analyzing needs and product requirements to create a design.
9. Teaching others how to do something.
10. Considering the relative costs and benefits of potential actions to choose the most appropriate one.

Knowledge

Note: *The technical and functional knowledge statements listed below are based on general occupational qualifications for Audio and Video Equipment Technicians commonly recognized by most employers. Typically, you will not be required to have all of the knowledge listed to be a successful performer. Recruitment and selection standards for an individual state job must be based on the specific knowledge, skills, and abilities for that job as indicated in the job announcement and job description in the Employee Work Profile.*

The Knowledge of:

1. Media production, communication, and dissemination techniques and methods. This includes alternative ways to inform and entertain via written, oral, and visual media.
2. Principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.
3. Transmission, broadcasting, switching, control, and operation of telecommunications systems, A/V equipment and installation, and videoconferencing equipment.
4. Circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
5. Structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
6. Business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.

Abilities

Note: *The technical and functional abilities listed below are based on general occupational qualifications for Audio and Video Equipment Technicians commonly recognized by most employers. Typically, you will not be required to have all of the abilities listed to be a successful performer. Recruitment and selection standards for an individual state job must be based on the specific knowledge, skills, and abilities for that job as indicated in the job announcement and job description in the Employee Work Profile.*

The Ability to:

1. Speak clearly so others can understand you.
2. Communicate information and ideas in speaking so others will understand.
3. Imagine how something will look after it is moved around or when its parts are moved or rearranged.
4. Communicate information and ideas in writing so others will understand.
5. Develop unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
6. Arrange, organize, techniques or ideas or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
7. See details at close range (within a few feet of the observer).

8. Develop a number of ideas, organize the ideas and solve problems.
9. Shift back and forth between two or more activities or sources of information (such as speech, sounds, touch, or other sources).

Tasks

Note: *The following is a list of sample tasks typically performed by Audio and Video Equipment Technicians. Employees in this occupation will not necessarily perform all of the tasks listed.*

1. Compress, digitize, duplicate, and store audio and video data.
2. Control the lights and sound of events, such as live concerts, before and after performances, and during intermissions.
3. Design layouts of audio and video equipment, and perform upgrades and maintenance.
4. Diagnose and resolve media system problems in classrooms.
5. Install, adjust, and operate electronic equipment used to record, edit, and transmit radio and television programs, cable programs, and motion pictures. This includes computer and multimedia equipment.
6. Maintain inventories of audio and video tapes and related supplies.
7. Meet with directors and senior members of camera crews to discuss assignments and determine filming sequences, camera movements, and picture composition.
8. Write Scripts, shoots original footage, edit video productions.
9. Operates and provides programming for 24 hour access cable channel and closed circuit TV Kiosk.
10. Mix and regulate sound inputs and feeds, or coordinate audio feeds with television pictures.
11. Monitor incoming and outgoing pictures and sound feeds to ensure quality, and notify directors of any possible problems.
12. Obtain, set up, and load videotapes for scheduled productions or broadcasts.
13. Set up, operate and troubleshoot videoconferencing and teleconferencing equipment.

INTERESTED?

Like people, occupations have traits or characteristics. These characteristics give important clues about the nature of the work and work environment, and give you an opportunity to match your own personal interests to a specific occupation. When you choose a job in an occupation that matches your own interests you have taken an important step in planning a successful and rewarding career.

The occupation of Audio and Video Equipment Technicians has **Conventional** and **Social** characteristics as described below:

Conventional — Conventional occupations frequently involve following set procedures and routines. These occupations can include working with data and details more than with ideas. Usually there is a clear line of authority to follow.

Social — Social occupations frequently involve working with, communicating with, and teaching people. These occupations often involve helping or providing service to others.

LICENSURE, REGISTRATION, OR CERTIFICATION REQUIREMENTS

Generally this is not required for Audio and Video Equipment Technicians positions in state government.

EDUCATIONAL, TRAINING, AND LEARNING OPPORTUNITIES

Audio and video equipment technicians set up or set up and operate audio and video equipment including microphones, sound speakers, video screens, projectors, video monitors, recording equipment, connecting wires and cables, computers, multimedia equipment, sound and mixing boards, and related electronic equipment for concerts, sports events, classrooms/lectures, meetings and conventions, videoconferencing, teleconferencing, presentations, and news conferences. Technicians may also set up and operate associated spotlights and other custom lighting systems.

The Department of Labor provides the following information:

Audio and video equipment technicians generally need a high school diploma. Many recent entrants have a community college degree or various other forms of postsecondary degrees although that is not always a requirement. They may substitute on-the-job training for formal education requirements. Working in a studio, as an assistant, is a great way of gaining experience and knowledge.

Northern Virginia Community College currently offers an on-line web based certificate in Audio Visual Communications Technology at: <http://eli.nvcc.edu/degrees.htm>). Other courses in electronics, computer software are available at the VCCS Website at: <http://www.vccs.edu>.

Postsecondary degrees can be found under Media Production, Communications, Art, and Information Systems in many colleges in the Commonwealth.

COMMONWEALTH COMPETENCIES

Competencies are a set of identified behaviors, knowledge, skills, and abilities that directly and positively impact the success of employees and the organization. Competencies can be observed and measured. When consistently demonstrated, competencies make employees particularly effective in their work. Competencies help lay out a road map to career success. You can use the Commonwealth Competencies to help improve your individual performance by adopting behaviors that make high performing employees successful in their jobs. In this way, you can use the Commonwealth Competencies for your further professional development.

The Commonwealth Competencies are:

1. Technical and Functional Expertise
2. Understanding the Business
3. Achieving Results
4. Serving the Customer
5. Teamwork
6. Interpersonal and Communication Skills
7. Leadership and Personal Effectiveness

The above competencies may be applied to employees throughout the Commonwealth of Virginia. They can be rank-ordered by agencies and hiring managers to represent the needs of a specific job. The rank ordering will change depending upon the occupation, an organization's priorities, the actual job requirements, and the supervisor's preferences.

Career success is both about what you do (applying your technical knowledge, skills, and ability) and how you do it (the consistent behaviors you demonstrate and choose to use) while interacting and communicating with others. Hopefully, by studying the Commonwealth competencies, identifying your developmental opportunities, and working to refine your own competence, you can take charge of your career!

For additional information about the **Commonwealth Competencies** go to: http://jobs.state.va.us/cc_planningctr.htm. For the competencies, we first list the competencies and then define each. Finally, we list competency indicators to describe what successful performance looks like.

COMMONWEALTH CAREER PATH

Career opportunities in the Commonwealth are not limited to moving “up” to the next highest role and pay band, changing positions, or becoming a supervisor. That is because most roles describe a broad group of occupationally related positions that perform a range of work that requires increased knowledge and skills. For that reason, Commonwealth roles describe the career paths within the same or higher-level role for the same or different Career Group. The broad salary range and the Commonwealth’s pay practices provide flexibility in recognizing career development and advancement. ([Salary Structure](#))

For example: **Audio and Video Equipment Technicians**

PAY BANDS	PRACTITIONER ROLES
3	Media Specialist II
4	Media Specialist III

PAY BANDS	MANAGER ROLES
4	Media Manager I
5	Media Manager II

Sample Career Path

Media Specialist II

The Media Specialist II role provides a career track for audio/video equipment technicians whose duties range from entry-level to advanced level. Duties include installing, maintaining, and integrating a variety of workstations and systems (i.e.: digital audio/video capture, manipulation, editing, compression, and multimedia authoring) and leading staff.

Media Specialist III

The Media Specialist III role provides a career track for audio/video equipment technicians whose expertise levels vary from advanced level to supervisory. Duties may include providing technical advice, information or logistical specifications; and producing multi-media programs.

Media Manager I

The Media Manager I role provides a career track for managers responsible for directing major exhibit and gallery projects or complex graphic design programs. Duties include leadership and creativity in managing a department that plans, develops, coordinates, and monitors the production of multiple concurrent exhibits and gallery projects that meet aesthetic and conservatorial standards as well as time and budget allowances.

Media Manager II

The Media Manager II role provides a career track for managers responsible for providing leadership and creativity in directing multi-media services used by state agencies for promotional, educational and informational purposes. Areas of responsibility include state distance learning programs and/or graphic communications.

ADDITIONAL OCCUPATIONAL INFORMATION CAN BE FOUND AT:

O*NET (Occupational Information Network)

http://online.onetcenter.org/gen_search_page

Virginia Employment Commission

<http://www.alex.vec.state.va.us/>

Career One Stop

<http://www.careeronestop.org/>

Virginia Career Resource Network

<http://www.vacrn.net/>