

TV Datacast Engineer

Position Details

Class Code: 4839

Job Family: Broadcast/Communications

Classification: Support Professional

Terms of Employment: [Pay Grade 56 on the Support Professional Salary Schedule](#)

FLSA STATUS: NON-EXEMPT

Position Summary

Under general supervision, installs, maintains, and repairs emergency service datacast communications systems using television broadcasting/production equipment. Assists statewide public and private organizations in converting existing digital data sources into files suitable for transmission to first responders in the field.

Essential Duties and Responsibilities

This list of Essential Duties and Responsibilities is not exhaustive and may be supplemented.

1. Installs broadcasting equipment.
2. Assists in researching/developing technology, interconnection, and delivery systems such as satellite uplinks and fiber optics.
3. Repairs broadcasting and production equipment.
4. Tunes transmitters for efficient operation.
5. Diagnoses equipment malfunctions.
6. Installs audio and video patching systems.
7. Maintains, troubleshoots, and repairs datacasting systems which integrate television transmitters, microwave links, satellite reception/transmission systems, remote site translator systems, studio production switcher systems, audio/video routing switcher systems, synchronizing/timing equipment, studio systems, audio consoles, video monitors/receivers, audio/video patching systems, and intercom

headset systems using technical schematics, Educational Broadband Service (EBS) systems, Master Antenna Television (MATV), Cable Television (CATV) systems, etc.

8. Maintains television broadcasting systems in accordance with Federal Communication Commission (FCC) television transmission parameters, frequency, bandwidth, modulation, power and FCC regulation RS-170A Advanced Television Systems Committee (ATSC) color television pulse standards, where applicable.
 9. Configures systems, specifies models, installs, evaluates, calibrates, and operates datacasting equipment, as required.
 10. Orders replacement parts and researches equivalent parts when originals are no longer available.
 11. Prepares research documentation for station grant applications and all potential users of emergency datacasting applications.
 12. Installs/configures field- and studio-based emergency service datacast equipment.
 13. Operates, trains, and instructs emergency service workers, first responders, and other assigned staff on datacast system.
 14. Researches datacasting applications in other states; advocates for use of relevant applications in Nevada.
 15. Conforms to safety standards, as prescribed.
 16. Performs other tasks related to the position, as assigned.
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Distinguishing Characteristics

Installs, repairs, and maintains emergency service datacast and television communications/broadcast equipment.

Knowledge, Skills, and Abilities (Position Expectations)

1. Knowledge of television transmitting, microwave, satellite, translator, and studio equipment.
2. Knowledge of Instructional Television Fixed Services (ITFS), MATV, and CATV systems.
3. Knowledge of electronic circuit troubleshooting.
4. Knowledge of television production activities.
5. Ability to distinguish color-coded wires.

6. Ability to work in remote and/or isolated areas.
 7. Ability to travel statewide.
 8. Ability to read, interpret, and apply FCC, Bureau of Land Management (BLM), Occupational Safety and Health Administration (OSHA), and Federal Emergency Management Agency (FEMA) rules/regulations.
 9. Ability to articulate clear, effective written/verbal communications.
 10. Ability to operate and maintain television equipment.
 11. Ability to read and interpret complex schematics.
 12. Ability to operate electronic testing equipment.
 13. Ability to analyze test results.
 14. Ability to judge when to act independently and when to refer situations to supervisors.
 15. Ability to plan and organize work.
 16. Ability to work in confined areas.
 17. Ability to work flexible hours or shifts.
 18. Ability to withstand heights and perform work safely.
 19. Ability to work cooperatively with employees, vendors, and the public.
 20. Ability to recognize/report hazards and applies safe work methods.
 21. Knowledge of computer-based broadcast technologies involving encoders/decoders, as well as basic installation, maintenance, and operations of said technology.
 22. Ability to communicate with first responders
 23. Ability to integrate user needs and technology applications.
 24. Possess physical and mental stamina commensurate with the responsibilities of the position.
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Position Requirements

Education, Training, and Experience

1. High school graduation or other equivalent (i.e., General Education Development (GED), foreign equivalency, etc.)
2. Six (6) years' experience repairing and maintaining communications/television broadcast equipment; or,
Associate's degree in electronic engineering from an accredited college/university, plus four (4) years' experience repairing and maintaining communications/television broadcast equipment.

Licenses and Certifications

1. A valid driver's license that allows the applicant/employee to legally operate a motor vehicle in Nevada. License must be maintained for the duration of the assignment.
2. Copy of current driving history (dated within six (6) months from the date printed) issued by the Department of Motor Vehicles (DMV) is required at the time of application and at the time of interview, prior to final selection.
3. Safe driving record, which must be maintained for the duration of the assignment.

Preferred Qualifications

1. Society of Broadcast Engineers (SBE) Certificate.
 2. FEMA certifications in National Incident Management Systems (NIMS) 100.200, 700, and 800.
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Document(s) Required at Time of Application

1. High school transcripts or other equivalent (i.e., GED, foreign equivalency, etc.)
 2. Transcript(s) from an accredited college/university, if applicable.
 3. Copy of a valid driver's license that allows the applicant/employee to legally operate a motor vehicle in Nevada.
 4. Copy of current driving history (dated within six (6) months from date printed) issued by the DMV. Must have a safe driving record.
 5. Specific documented evidence of training and experience to satisfy qualifications.
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Examples of Assigned Work Areas

Clark County School District and Vegas PBS facilities, Las Vegas and Reno TV stations, schools, CCSD school police station, Carson City-based state agencies, statewide county government agencies, and remote location sites.

Work Environment

Strength

Sedentary/medium – exert force of 20-50 lbs., occasionally; 10-25 lbs., frequently; up to 10 lbs., constantly.

Physical Demand

Frequent sitting, standing, walking, pushing, pulling, carrying, stooping, kneeling, crouching, reaching, handling, and repetitive fine motor activities. Hearing and speech to communicate in person, via video conference and computers, or over the telephone. Mobility to work in a typical office setting and use standard office equipment. Stamina to remain seated and maintain concentration for an extended period of time. Vision: Frequent near acuity, occasional far acuity, and color vision. Vision to read printed and online materials, a Video Display Terminal (VDT) screen, or other monitoring devices.

Environmental Conditions

Varies from climate-controlled office settings to work outdoors with temperatures ranging from mild/moderate to extreme cold/heat. Exposure to noise levels ranging from moderate to loud for occasional to frequent time periods.

Hazards

Frequent electrical shock hazards. Furniture, office equipment, communicable diseases, chemicals and fumes (as related to specific assignment), and power/hand-operated equipment and machinery (as related to specific assignment.)

Examples of Equipment/Supplies Used to Perform Tasks

District-issued four-wheel drive/personal vehicle, spectrum analyzer, oscilloscope, waveform monitor, vector scope, field strength meter, analog and digital multi-meters, circuit schematic drawings, soldering station, hand/power tools, test generator, ladders, etc.

AA/EOE Statement

The Clark County School District is proud to be an equal opportunity employer. The Clark County School District is committed to providing all applicants and employees equal employment opportunities without regard to race, color, religion, sex, gender identity or expression, sexual orientation, national origin, genetics, disability, age, military status, or other characteristics protected by applicable law. Here at Clark County School District, we are a diverse group of people who honor the differences that drive innovative solutions to meet the needs of our students and employees. We believe that through a culture of inclusivity, we have the power to reflect the community we serve.

Job Revision Information

- Revised: 07/18/23
- Created: 10/01/19