

# COLTON JOINT UNIFIED SCHOOL DISTRICT

## **CLASS TITLE: ELECTRONICS TECHNICIAN**

### **BASIC FUNCTION:**

Under the direction of an assigned supervisor, perform skilled electronics work in the installation, maintenance and repair of electronic devices, including fire alarm systems, communication systems, intercom systems, bell and clock systems, audio-visual equipment, and other electronics as assigned.

### **REPRESENTATIVE DUTIES:**

#### **ESSENTIAL DUTIES:**

Perform skilled electronics work in the installation, maintenance and repair of various electronic devices including fire alarm systems, communication systems, intercom systems, bell and clock systems, audio-visual equipment and other electronics as assigned; align, adjust and calibrate electronic equipment according to manufacturer's specifications.

Install, troubleshoot, repair and maintain instructional media and audio-visual equipment, including, televisions/monitors, LCD Projectors, CD players, DVD players/recorders, portable stereos, desk top cameras, smart boards, overhead projectors, video cameras, projectors and related equipment.

Install, troubleshoot, repair and maintain communication systems and audio-visual equipment utilizing schematics, manufacturer's service manuals, web-based vendor support and electronic test equipment to repair related electronic equipment.

Operate electronic test equipment, including AC and DC power supplies, voltmeters, ammeters, ohmmeters, oscilloscopes and others; operate scissor and aerial lifts, and utilize stepladders as needed to repair and install equipment at heights; drive a vehicle to various sites to conduct work.

Communicate with staff regarding issues, malfunctions or problems; test equipment and make repairs as needed; arrange and monitor repair work.

Install, troubleshoot, maintain, and repair school electronic bell and clock systems and related equipment, such as wiring, AC power sources, DC power supplies, and others; troubleshoot and repair components and circuit cards; operate a computer and assigned software to program school clocks, bells and intercom systems according to established schedules.

Install, troubleshoot, repair and maintain school intercom systems and related equipment, including switching units, phones, speakers and wiring; utilize a variety of hand tools and soldering equipment.

Install, troubleshoot, maintain, and repair public address systems and related equipment, including microphone and speaker cabling, audio mixers and amplifiers; replace defective wiring according to established procedures.

Install, troubleshoot, maintain and repair closed-circuit television systems and related equipment; including video monitors, video distribution amplifiers, antennas and other related equipment.

Troubleshoot, repair and maintain school fire alarm systems and related equipment, including initiating and signaling devices and associated equipment.

Install, troubleshoot, repair and maintain non-data based telephone systems and related equipment, including telephones and associated cabling/wiring.

Plan and coordinate the set-up, operation and take down of amplifiers, mixers, speakers, microphones, cables and supporting equipment for live performances, ceremonies or other school events; troubleshoot and repair electronic based issues during performances.

Estimate materials, time and cost related to work orders; requisition and maintain inventory of supplies; make recommendations regarding the purchase of new equipment.

Provide electronics maintenance guidance and instruction to site personnel as needed.

Prepare and maintain records related to assigned activities.

**OTHER DUTIES:**

Perform related duties as assigned.

**KNOWLEDGE AND ABILITIES:**

**KNOWLEDGE OF:**

Electronic and electrical theory, principles, practices.

Methods, tools and procedures used in the operation, repair, troubleshooting and maintenance of electronic equipment.

Operation of a computer and assigned software.

Master clock systems, fire alarms and intercom systems troubleshooting and repair.

Computers and accessories operation, troubleshooting and repair.

Mechanical, electrical and electronic theory and practice.

Basic integrated circuit technology.

Assembly, repair and operation of audio-visual computer, electronic and communication equipment.

Safe work practices.

Basic record-keeping techniques.

**ABILITY TO:**

Perform skilled work in the maintenance and repair of electronic and audio-visual equipment.  
Diagnose defects, service, adjust and repair a variety of audio-visual, computer, electrical, electronic and mechanical equipment.  
Work from circuit diagrams, blueprints, and schematic drawings.  
Evaluate serviceability and quality of various types of audio-visual equipment.  
Utilize applicable testing and measuring devices and various power and hand tools skillfully and safely.  
Understand and follow oral and written instructions.  
Establish and maintain cooperative and effective working relationships with others.  
Work independently with little direction.  
Prioritize and schedule work.

**EDUCATION AND EXPERIENCE:**

Education: Graduation from high school or equivalent and completion of a college or trade school program in electronics technology.

Experience: Three years of experience in the repair of electronic and audio-visual equipment.

Any combination of training and/or experience that would likely provide the required knowledge and abilities may be considered.

**LICENSES AND OTHER REQUIREMENTS:**

Valid California driver's license.

**WORKING CONDITIONS:**

**ENVIRONMENT:**

Indoor and outdoor work environment.  
Driving a vehicle to conduct work.  
Occasional evening or variable hours for performances or events.

**PHYSICAL DEMANDS:**

Dexterity of hands and fingers to operate tools and machines utilized in the electronics trade.  
Reaching overhead, above the shoulders and horizontally.  
Bending or stooping to perform repair and maintenance tasks.  
Lifting, carrying, pushing or pulling heavy objects.  
Hearing and speaking to exchange information.  
Seeing to perform electrical work.  
Kneeling, crouching and crawling on floors to install equipment or make repairs.  
Climbing ladders.

**HAZARDS:**

Electrical power supply.  
Working at heights.