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# PERSONNEL COMMISSION

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LONG BEACH  
UNIFIED SCHOOL DISTRICT  
*Excellence & Equity*

**Class Code: 0110**  
**Salary Range: 34 (C2)**

## **ELECTRONICS TECHNICIAN**

### **JOB SUMMARY**

Under general supervision, install, troubleshoot, repair, test and service a variety of low voltage electronic equipment, devices, components and circuits; perform related duties as assigned.

### **EXAMPLES OF DUTIES**

*The classification specification does not describe all duties performed by all incumbents within the class. This summary provides examples of typical tasks routinely performed in this classification.*

- Perform preventative and routine maintenance on low voltage electronics systems and technologies; troubleshoot, assemble, install, test, repair and/or replace a variety of equipment such as fire and intrusion alarms, clock and bell systems, technology smart cart chargers, public address systems, two-way radio communications, analog and digital audio and video systems, auditorium and portable sound systems, mixers, amplifiers, wireless microphones, speakers, televisions, projectors, marquees, scoreboards, access control systems, surveillance cameras, and similar equipment. **E**
- Diagnose and isolate electro/mechanical and electronic malfunctions and repair or replace defective parts or components in the shop or at sites. **E**
- Use a variety of computer software, electronics meters, soldering irons/guns, hand and power tools, equipment and technical devices to troubleshoot, test, repair and/or replace low voltage sound, communication, fire and security alarm systems to determine operational status and functionality according to specification design and standards. **E**
- Troubleshoot, test, and repair data jacks and wiring for networked systems; replace faulty connectors; terminate lines with new connectors; troubleshoot and test fiberoptic connectors; notify supervisors of potential need to repair and/or replace fiberoptic cables. **E**
- Rewire and run conduit and cabling for systems installed at District sites used in low voltage electronics, communications systems, and fire and intrusion alarms. **E**
- Locate equipment at school sites and District buildings where site plans may not be updated or accurate; create and/or update systems and wiring diagrams; troubleshoot equipment and devices for which no schematics or diagrams exist to determine defective or malfunctioning components; make repairs or replace as needed. **E**
- Estimate and keep records of new, pending, in-process, and completed work orders, time and material for work; update and input information into a variety of

spreadsheets, logs, forms, and other documents; requisition parts and supplies as needed. *E*

- Package warranty, end-of-life, and/or obsolete equipment for vendor/manufacturer return, disposal and/or salvage, as appropriate. *E*
- Provide technical expertise, information and assistance to District staff regarding electronics systems operations and functionality; advise supervisor of unusual equipment and/or parts issues, trends or problems and recommend appropriate corrective action. *E*
- Provide feedback and make recommendations for use of contractors and in the purchase of new equipment for assigned functions. *E*
- Participate in elevator compliance testing inspections with inspector, certified elevator systems technicians, and other District staff; test alarm initiating devices and other system parts, replacing as appropriate per inspector's instruction; input changes into related software programs and/or alarm panel keypad to correct identified issues. *E*
- Design circuitry and program systems operating on LAN and WAN networks, such as alarm, public address, audio-visual and similar systems. *E*
- Perform systems interface programming with vendor/equipment software on a variety of equipment and systems to troubleshoot, analyze, repair, and update functionality issues. *E*
- Keep current on new technological developments and attend training to acquire knowledge of new systems and equipment. *E*
- Inspect and approve donated equipment and devices to determine usability for the District. *E*
- Perform related duties as assigned.

*Note: At the end of some of the duty statements there is an italicized E, which identifies essential duties, required of the classification. This is strictly for use in compliance with the Americans with Disabilities Act.*

### **DISTINGUISHING CHARACTERISTICS**

An Electronic Technician does field and bench work in the assembly, repair, adjustment and testing of a variety of low voltage electronic/electromechanical equipment, systems, devices and components.

### **EMPLOYMENT STANDARDS**

#### **Knowledge of:**

Principles of electrical and electronic theory, circuitry and semi-conductors.

Principles of computer operating and network systems associated with electronic systems and circuits.

Fire alarm and intrusion systems.

Electrical measuring instruments and software used in servicing low voltage electronic equipment, fire and intrusion alarms, and electronic devices including techniques applied to digital and analog circuits.

Shop math applicable to electronic equipment repair.

Operation of a computer and assigned software.

Safety regulations and practices relative to repair and maintenance of electronic equipment.

Relevant CalOSHA workplace codes and safety regulations.

Proper methods, materials, tools, equipment used in the repair and maintenance of electrical/electronics equipment.

**Ability to:**

Work individually or with District staff, vendors and contractors on systems maintenance, repair and/or replacement projects.

Troubleshoot assigned electronics systems and equipment.

Work from blueprints, layouts, schematic diagrams, and manufacturer's instructions.

Disassemble and assemble electronics without drawings or reference,

Use a variety of electronic test equipment.

Stay current on new technological developments in District technologies.

Maintain accurate work records.

Use the tools and test equipment of the trade with speed and competence including soldering of small parts and replacement of components.

Acquire and apply technical knowledge from manuals, written materials and fellow workers.

Follow oral and written instructions.

Operate a computer and assigned software.

Operate a vehicle observing legal and defensive driving practices.

Establish and maintain effective working relationships with others.

**Education and Training:**

Graduation from high school or equivalent and completion of a recognized college or military basic electrical and electronics theory degree or certificate program.

Certifications in any of the following are desirable:

Completion of a union Electronic Technician apprenticeship program

C-7 Low Voltage Systems Contractor State License Board certification

Notifier Fire Alarm certification

Building Industry Consulting Service International (BICSI) Installer 1

Building Industry Consulting Service International (BICSI) Installer 2

Building Industry Consulting Service International (BICSI) Technician

AND

**Experience:**

Two years journey-level installation and repair of electronic equipment and devices.

Any other combination of training and/or experience, which demonstrates that the applicant is likely to possess the required skills, knowledges and abilities, may be considered.

**SPECIAL REQUIREMENTS**

Valid Class C California Driver's License.

An applicant for this class will be required to obtain, at his/her own expense, and submit his/her motor vehicle driving record at the time of appointment. The record must meet and be maintained at the district's safe driving record standard. Failure to meet this requirement will result in the disqualification and/or rejection of the eligible regardless of any other standing.

Some incumbents in this class may be required to wear protective clothing, gear and equipment as required by law.

**WORKING ENVIRONMENT**

Outdoors occasionally in inclement weather.  
Indoors in schools and other buildings.  
Attics, dust, tight spaces and under buildings.  
Exposure to high voltage.

**PHYSICAL DEMANDS**

Lifting up to 50 pounds.  
Bending, crouching and crawling.  
Reaching overhead and above shoulders to work on ceiling and wall electronic technologies.  
Ascending and descending ladders.  
Standing and sitting for extended periods of time while working on assigned projects.  
Pushing and pulling equipment carts and wires.  
Dexterity of fingers and hands to operate a computer, hand and power tools and test equipment.  
Seeing to observe and perform repairs and distinguish the colors of wires.

*AMERICANS WITH DISABILITIES ACT*

Persons with certain disabilities may be capable of performing the essential duties of this class with or without reasonable accommodation, depending on the nature of the disability.

**APPOINTMENT**

In accordance with Education Code Section 45301, an employee appointed to this class must serve a probationary period of six (6) months during which time an employee must demonstrate at least an overall satisfactory performance. Failure to do so shall result in the employee's termination.

PCA: 3/21/1996  
Revised: 3/2/2000  
Revised: 6/29/2006  
Revised: 7/25/2024