

## **RIVERSIDE UNIFIED SCHOOL DISTRICT**

**CLASS TITLE: ELECTRONICS TECHNICIAN**

**Range: 29**

### **BASIC FUNCTION:**

Under the direction of an assigned supervisor, perform specialized technical work in the repair, installation, maintenance, and operation of a variety of electronic and audio-visual equipment including but not limited to conventional and addressable fire alarm systems including voice evacuation systems as well as integration points to various building systems such as fire pumps and elevators; Intrusion alarm systems; IP based cameras, NVR servers and VMS (video management operating systems); Conventional, and IP based bells, clock and intercom systems; MDF/IDF network interface and associated infrastructure; software installation, maintenance, and training; firmware installation; 2 way radio and repeater systems; Overhead projectors, LCD projectors, and TV display systems; and various sound reinforcement systems.

### **REPRESENTATIVE DUTIES:**

Perform specialized technical work in the repair, adjustment, replacement, modification and routine maintenance to Conventional, Addressable, Voice Evacuation and Network Fire alarm panels and devices. *E*

Evaluate, repair and operate fire alarm system interfaces as they relate to various building systems such as elevators, fire pumps and sprinkles and HVAC systems. *E*

Evaluate, repair and operate various security systems including, conventional, dial up, and network intrusion alarm systems, IP based cameras and NVR servers and VMS (video management operating systems). *E*

Evaluate and repair, Install, and maintain equipment such as video monitors, overhead projectors, LCD projectors, and TV display systems. *E*

Perform specialized technical work in the operation, repair, maintenance, and troubleshooting of personal computer and network hardware including software installation, firmware installation, configuration of personal computers and peripheral equipment to work with represented systems. *E*

Diagnose and resolve software problems. *E*

Run trouble shooting software. *E*

Evaluate, repair and operate conventional and IP based bells, clocks and intercom systems. *E*

Program and maintain VHF and UHF 2-way radios, repeaters, check radios in and out to District staff; replace batteries. *E*

Review plans and specifications, update specifications, and verify proper installations for new construction, remodels, additions and deferred maintenance projects; test and install various electronic in offices, classrooms and portables. *E*

Estimate cost and time for major upgrades, repairs and installation of equipment and systems; provide testing of sample equipment proposed for purchase; make recommendations related to the purchase of new systems. *E*

Provide technical assistance and training to District personnel, staff and others in the use of equipment, systems and use software applications as they relate to the Communications Shop within Maintenance and Operations. *E*

Monitor and maintain daily the functionality and operation of all types of fire systems, bell systems, clock systems, CCTV, and security systems. Report and repair any all malfunctions in a timely manner. *E*

Assist school sites, other district offices and outside agencies by producing various reports, logs and video reproduction in support of investigation activities. *E*

Maintain detailed records and logs in compliance with various regulations and codes. *E*

Respond to alarm activations throughout the District. *E*

Maintain inventory of spare parts needed to support the services offered by the division. *E*

Provide assistance to other departments and school sites to insure proper integration of systems. *E*

Work collaboratively with other departments in the integration and networking of various systems. *E*

Maintain, Setup, and operate sound equipment for special functions including student performances, board meetings, staff meetings, and public events. *E*

Inspect and test equipment to determine source and feasibility of repair. *E*

Operate and maintain a variety of specialized tools and test equipment related to network maintenance and electronic repair work; drive a vehicle to conduct work and deliver equipment to schools. *E*

Schedule preventive maintenance activities as directed. *E*

Perform related duties as assigned.

**KNOWLEDGE AND ABILITIES:****KNOWLEDGE OF:**

Electronic and electrical theory, principles and practices.

Methods, tools and procedures used in the operation, repair and maintenance of electronic equipment including personal computers.

Fiber optic, coaxial, and copper cabling and cross connection equipment.

Digital and analog testing methods.

Voice and video terminal equipment installation and troubleshooting.

Basic telephone systems wiring, cable fault locations.

Network operation and infrastructure layout

NFPA Codes (Panels, fire sprinklers, fire suppression)

Methods and procedures for storing equipment, materials and supplies.

Safety practices and precautions.

Basic record-keeping techniques.

**ABILITY TO:**

Repair, maintain and troubleshoot a variety of electronic and audio-visual equipment including personal computers and peripheral equipment.

Maintain records and files.

Use network equipment and test devices

Schedule and perform work to meet established time lines.

Understand light theory and use test meters

Work independently with minimal supervision.

Establish and maintain effective and cooperative working relationships with others.

Communicate effectively with others.

Observe legal and defensive driving practices.

Maintain current knowledge of technological advances in the field.

Maintain work pace appropriate to given work load.

Use any and all tools required to maintain analog telephone systems.

Communicate effectively with employees, vendors, and the public.

Work in high locations and operate aerial platforms.

**EDUCATION AND EXPERIENCE:**

Any combination equivalent to: graduation from high school supplemented by course work in electronics and training in electronic equipment repair and three years experience in the repair and maintenance of electronic equipment.

**LICENSES AND OTHER REQUIREMENTS:**

Valid California driver's license.

**WORKING CONDITIONS:****ENVIRONMENT:**

Indoor and outdoor environment.

Drive a vehicle to conduct work.

Noise from equipment operation.

#### PHYSICAL ABILITIES:

Dexterity of hands and fingers to operate a variety of electronic testing equipment and measuring devices.

Hearing and speaking to exchange information.

Reaching overhead, above the shoulders and horizontally.

Bending at the waist.

Carrying, pushing or pulling equipment.

Climbing ladders and working from heights.

Seeing to distinguish colors.

Lifting and carrying heavy objects.

Crawling, crouching and kneeling to conduct work.

#### HAZARDS:

Exposure to electrical power supply, high voltage and hazardous chemicals

Working on ladders or scaffolding at heights.

Working in cramped or restrictive work chamber.

Working around and with machinery having moving parts.

Exposure to vapors, gases and fumes.