

27 51 13 – Paging System

DIVISION 27 - Communications



STATEMENT OF PURPOSE & BACKGROUND

- Scope:
 - This section is for certain projects where a stand-alone paging system may be required, or where a replacement system is needed that is not integrated with the fire alarm system. See Section 28 31 00 for Digital Fire Alarm EVAC System.
 - Provide 25/70V Multi-Zone paging system including all call paging access from the District Cisco IP Phone System. System shall utilize DTMF access to individual zone pages, and all calls.
 - System shall include speakers, horns and interfaces to Classroom Sound Systems.
 - System shall provide tone generation for Class Change times. Contact closure to be provided by the Clock System Master Clock.
 - District may desire to salvage some existing Paging/Intercom components. Verify with PM if any components are to be salvaged.
 - Equivalent manufacturers must be approved in writing by SPPS PM and in accordance with the provisions of the Contract.

- Revision history of section:
 - 03/04/2019 (date of adoption)
 - 03/26/2021

OUTLINE SPECIFICATION

- Part 1 General
 - Provide Zone Page Adapters, Power Amplifiers and cabling per manufacturer's requirements.
 - System shall be capable of a minimum of eight zones.
 - Zones shall be a minimum of:
 - All Call
 - Administrative Areas
 - Academic Areas
 - Exterior
 - Connection to Fire Alarm
 - Zone 6-8 To Be Determined

Part 2 Products

- Multi-Zone Page System: Minimum 8-Zone system with DSP and volume control for each zone and area.
 - Biamp AudiaFLEX CM with a minimum of one(1) TI-2 card, two(2) IP-2 cards, nine(9) OP-2e cards, and Logic Box.
 - Prior approved equivalent

- System Amplifiers:
 - Bosch/EV
 - QSC
 - Toa

- Flush Mounted Speaker: 8" Coaxial loudspeaker, 22 gauge steel back-box with bridge support, 25V and 70 Volt line matching transformer, frequency response of 90-15,000 Hz with average sensitivity of 91 dB 1w\1m and vandal resistant baffle.
 - AtlasIED
 - Quam
 - Valcom

- Surface Mounted Speaker: 8" Coaxial loudspeaker, 25V and 70 Volt line matching transformer, frequency response of 90-15,000 Hz with average sensitivity of 91 dB 1w\1m and Quam ES2WVP back box with BS8W baffle.
 - AtlasIED
 - Quam
 - Valcom

- Horn Type Speaker: Minimum dispersion shall be 110 degrees horizontal and vertical, minimum frequency response of 275Hz to 14,000Hz. Minimum sensitivity of the loudspeakers shall be 121dB at 1 meter at 15 watts input, 25 and 70 Volt line matching primary transformer. Transformer shall be built in with selector switch for secondary transformer taps that shall be 1/2 watt, 1 watt, 2 watts, 7 watts and 15 watts on the 25v line; and 1 watt, 2 watts, 4 watts, 7 watts and 15 watts on the 70v line, and weather-proof design and approved by manufacturer for outdoor use.
 - AtlasIED
 - Quam
 - Valcom

- Part 3 Execution
 - Install all necessary conductors to all devices indicated on Drawings, and provide all necessary conductor terminations to all devices. Furnish all necessary pathway support including conduit, cable tray, and/or raceway as required.
 - Include system interfaces with Master Clock System for Class Time changes.
 - All installation and programming are by contractor.
 - Provide even paging coverage in occupied areas.
 - Classroom sound system interface with the Paging System is via a phoenix type connector. Classroom Sound System paging input has an impedance of approximately 900 ohms.
 - Each classroom shall be homerun to the nearest Telecom Room. No more than six hallway and other occupied area speakers shall be homerun to the nearest Telecom Room.
 - Provide and arrange for a manufacturer representative of the System to train Owner in the operation and maintenance of system.

End of Section