

SECTION 16730 - INTERCOM / PAGING SYSTEM

GENERAL

1.1 SECTION INCLUDES

- A. Paging System Controller
- B. Paging System Telephone Interface
- C. Paging System Speakers
- D. Paging System Amplifiers

1.2 RELATED SECTIONS

- A. Section 16111 - Conduit
- B. Section 16123 – Building Wire and Cable

1.3 REFERENCES

- A. Equipment shall be UL listed.
- B. Work shall conform to the requirements of ANSI/NFPA 70.

1.4 SYSTEM DESCRIPTION

- A. The system shall consist of a modular telephone zone paging control system with all necessary components including, central processing controller, telephone interface, zone paging module, amplifiers and speakers.

1.5 QUALIFICATIONS

- A. Installer: Authorized installer of paging system equipment manufacturer with five years experience and service facilities within 100 miles of Project.

1.6 SUBMITTALS

- A. Submit all system components under provisions of Section 16010.
- B. Shop Drawings: Indicate component interconnecting wiring and wiring diagrams of field wiring to all remote devices.

1.7 MAINTENANCE SERVICE

- A. At the Owners option, system supplier shall furnish service and maintenance of paging system for one year from Date of Substantial Completion.

1.8 WARRANTY

- A. Provide system warranty against defects in material and workmanship for the following periods after date of purchase:
1. Internal electronic components: Five years.
 2. Workmanship and labor: three years.

PRODUCTS

2.1 PAGING SYSTEM CONTROLLER

- A. Manufacturer
1. Bogen Model PCM2000
 2. Substitutions: Or Approved Equal.
- B. Product Reference: Products specified herein are referenced by Bogen model numbers. Equivalent products by other approved manufacturers will also be considered.
- C. Description: Microprocessor controlled zone paging system that integrates telephone communications with the following features:
1. Simultaneous high and low power paging
 2. Zone and zone group paging
 3. Background music assigned per zone
 4. Night ringer zone group
 5. Emergency all-facility page override
 6. Daily master clock synchronization
 7. Relay driver per zone
 8. Auxiliary contacts
- D. The unit shall include flanges with keyhole slots for wall-mounted
- E. Telephone Interface Module: Bogen model PCMTIM. The module shall provide for telephone interface selection via built-in DIPswitches. It shall include a volume control for tone and BGM source and RJ-11 jacks for night ringer, telephone line and override.
- F. Central processing module: Bogen model PCMCPU. The module shall provide for satellite system identification via built-in DIPswitches. It shall include a locking program/selector switch, satellite data link, RCA jack and 12-volt DC power source jack.
- G. Zone Paging Module: Bogen model PCMZPM. Provide one zone paging module for each 3 paging zones in the system.

2.2 SPEAKERS

- A. Ceiling Speakers: Bogen Model S810 with T725 transformer. Recessed ceiling speaker with back box and ceiling grille.
 - 1. Type: 8" Dual Cone.
 - 2. Frequency Range: 70Hz to 15kHz.
 - 3. Sensitivity: 96dB (4ft. @ 1 watt).
 - 4. Power Capacity: 15 watts.
 - 5. Ceiling grille: Bogen model PG8A. 13" aluminum grille with satin finish.

- B. Orbit Pendant Speakers (Receiving Building Room 100 and Terminal Building Room 205): Bogen Model OPS1W.
 - 1. Frequency Range: 60Hz to 19kHz.
 - 2. Sensitivity: 89.5dB (1 watt. @ 1 meter).
 - 3. Power Capacity: 32 watts @ 70V.
 - 4. Dimensions: 15" diameter by 9.25" deep.
 - 5. Weight: 10 pounds
 - 6. Accessories: Suspension cables

2.3 ATTENUATORS

- A. Bogen model AT35A rated for 35 watts on a 70V line. Attenuators shall include 10 stops in an OFF position.

EXECUTION

3.1 INSTALLATION

- A. Install equipment in accordance with manufacturer's instructions.
- B. Splice cable only in accessible junction boxes or at terminal block units.
- C. Make cable shields continuous at splices and connect microphone circuit shield to equipment ground only at Paging Systems Controller.
- D. Use suitable cable fittings and connectors.

3.2 INTERFACE WITH OTHER SYSTEMS

- A. Coordinate the installation of ceiling speakers with Architectural Reflected Ceiling Plans.

3.3 MANUFACTURER'S FIELD SERVICES

- A. Include making final wiring connections, inspection and adjusting of completed installation, and systems demonstration.
- B. Certify that installation is complete and performs according to specified requirements.

3.4 DEMONSTRATION

- A. Demonstrate system to designated Owner personnel. Briefly describe function, operation, and maintenance of each component.

END OF SECTION