

Zone Paging Module

Model ZPM-3



Features

- Three-zone switching plus All-Call
- Three field-programmable paging-zone groups, each consisting of up to three zones
- Direct connection to page ports, loop-start and ground-start trunks
- 100W total power handling capacity
- DIP switches select zone type (one way or talkback), talk battery (24V/48V), and tone options
- Built-in night ringer in all zones or group of three user-selected zones
- Shift change or emergency-call (with alert tone) in all zones or group of three user-selected zone
- Programmable all-call inhibit and privacy beep for talkback zones
- Built-in punch block (type 66) speeds installation
- Background music input with volume control
- Optional battery backup

Description

The Bogen ZPM-3 is a telephone-compatible zone paging module with all-call and talkback capabilities serving up to three one- or two-way paging zones. The unit can also be field-programmed to provide paging-zone groups (up to three paging-zone groups can be programmed, with each group consisting of up to three user-selected zones). A night ringer feature is included and sounds in all zones or in a programmable zone group of up to three user-selected zones (can use either a high-voltage ring signal or contact closure). A shift change/emergency-call feature interrupts normal operation and sounds either a shift change tone or emergency-call alert tone in all zones or in a programmable zone group of up to three user-selected zones. (The shift change/emergency-call feature requires additional customer-supplied equipment — master clock with a contact closure or preamplified microphone with built-in or external contact closure.)

The ZPM-3 can connect directly to loop start and ground start trunks, and to PBX or KEY paging ports which provide a normally-open contact closure and DTMF capability. Connection to an analog station line (station port) is possible when used with a suitable telephone access module, i.e., Bogen Model TAM-B. The ZPM-3 can also be used in a paging system independent of a telephone system. For all applications, a 24-volt power supply is required. (The Bogen Model PRS-ASAC, or equivalent, power supply is recommended.) Terminals are provided for connection to an additional 48-volt power supply when 48V Talk Battery operation is required (The Bogen PRS-48, or equivalent, power supply is recommended).

The ZPM-3 works with self-amplified or central-amplified paging systems. Self-amplified systems require one- or two-way self-amplified speakers or horns (only one talkback speaker or horn can be used per talkback zone). Central-

amplified systems require an amplifier for one-way and all-call paging (up to 100 watts) and a talkback amplifier for two-way intercom. A background music source can be connected directly to the ZPM, or to a separate amplifier which can be used to supply background music to all unpagged zones.

Built-in DIP switches are used to select the field-programming mode, enable/disable the preannouncement and confirmation tones, and set the paging mode (one-way or talkback) of each zone. Field-programming (via tone phone) is used to assign individual zones to the paging-zone groups, night ringer zone group, and shift change/emergency-call zone group. Field-programming is also used to enable/disable the privacy beep for two-way zones, select the shift change/emergency-call tone, and inhibit all-call operation. An optional battery backup feature retains field-programming for up to two hours in the event of a power failure.

A control is included to adjust the volume of the preannouncement, confirmation, and shift change/emergency-call tones. Separate controls are provided to adjust the night ringer tone and background music volume. All volume controls are screw-driver-adjustable.

The ZPM-3 is registered under Part 68 of FCC rules. A built-in punch block (type 66) facilitates installation. The unit includes flanges with keyhole slots for wall-mounting and measures 7-1/4"H x 9"W x 1-3/8"D.



Registered under Part 68 of FCC Rules

Technical Specifications

Ringer Equivalence:	1.2B
Operating Voltage:	24VDC, 350mA minimum. Model PRS-ASAC Power Supply Recommended
Operating Current (Max.):	350mA
Audio Power Capability:	100W (70VAC or 25VAC)
DTMF Tones:	Signal Level — 25dBm; Twist Limit — 10dB; Tone Duration (min.) — 40ms; Interdigit Pause — 40ms
Zone Selection:	Dial Pulse Speed — 8 to 20 ppm; Percent Break — 52% to 64%
Environmental:	Operating Temperature — 0° to 125°F; Operating Humidity — 0 to 95% noncondensing
Dimensions (Overall):	7-1/4" H x 9" W x 1-3/8" D (includes wall-mounting flange)
Shipping Weight:	3 lbs.

Architects and Engineers Specifications

The zone paging control module shall be a Bogen Model ZPM-3. It shall be designed for direct connection to loop start and ground start trunks, and to PBX or KEY paging ports which supply a normally-open contact closure and DTMF capability. It shall also connect to analog station ports using a suitable access module.

The unit shall include flanges with keyhole slots for wall-mounted installation and a built-in 60-terminal punch block. Operation shall require a 24V power supply for all applications. Contacts shall be provided for connection to an additional 48V power supply when 48V Talk Battery operation is required.

The paging control module shall be registered under Part 68 of FCC rules and shall provide at least the following features and functions:

1. Up to three one- or two-way paging zones plus All-Call.
2. Total power handling ability of 100 watts and operation with self-amplified paging systems or central-amplified paging systems.
3. Up to three paging-zone groups. Each paging zone group shall be field-programmable and shall contain up to three user-selected zones.
4. Night ringer circuitry which, when activated by high-voltage ring signal or contact closure, shall sound a night ringer tone in all zones. Alternately, it shall be possible to field-program (via tone phone) a night ringer zone group which shall sound the night ringer tone in up to three user-selected zones.
5. Shift change or emergency-call signalling as described below:
 - **(Use for shift change feature)** A shift change tone feature shall be provided. This feature shall be activated by a customer-supplied contact closure, which will energize a customer-supplied external relay, disconnect any current page, and sound a user-selected tone in all zones. Alternately, it shall be possible to field-program (via tone phone) a shift change zone group which shall sound the shift change tone in up to three user-selected zones.
 - **(Use for emergency-call feature)** An emergency call feature shall be provided. This feature shall be activated by a customer-supplied contact closure (requires a preamplified microphone with built-in contact closure or microphone and other customer-supplied switch). The emergency-call feature shall override the normal paging features of the module, sound a user-selected alert tone in all zones, and open an audio channel for the emergency page. Alternately, it shall be possible to field-program (via tone phone) an emergency-call zone group which shall preempt normal operation, sound the alert tone, and open the audio channel for an emergency page in up to three user-selected zones.

— **(Use for shift change and emergency-call feature)**

- A choice of tones shall be provided for the shift change signal (or emergency-call alert signal). The desired tone shall be selected via field-programming and shall consist of either a single-tone burst or dual-tone burst, each with a duration of one second.
6. Built-in DIP switches which shall enable/disable the field-programming mode, select the zone type (one-way or two-way), Talk Battery type (24V or 48V), and tone options (preannounce and confirmation tones).
 7. Field-programming from a touch-tone phone. Field-programmable functions shall include assigning individual zones to the paging-zone groups, night bell zone group and shift change/emergency-call zone group. Field-programming shall also be used to enable/disable a privacy beep over two-way (talkback) zones, select the desired shift change/emergency-call tone, and enable/disable access to All-Call paging.
 8. Mute contacts which go to a normally-open state whenever the unit is accessing a two-way zone. These contacts may be used to operate the talkback muting function on talkback amplifiers.
 9. External contact closure for activating external equipment or for use in ground start trunks, shift change and emergency call applications. The contacts shall change state when the unit goes off hook.
 10. Capability of providing uninterrupted background music to all zones not being paged.
 11. Battery backup option which will retain user-programmed parameters for up to two hours in the event of a power failure. The battery backup option shall require four (4) AA size nickel cadmium batteries.
 12. Background music source input jack and screwdriver-adjustable volume control.
 13. Screwdriver-adjustable volume control of confirmation, preannounce, error, and shift change/emergency-call tones.
 14. Screwdriver-adjustable night ringer volume control.
 15. Wall-mounting design with dimensions of 7-1/4" x 9" x 1-3/8". Shipping Weight shall be 3 lbs.



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