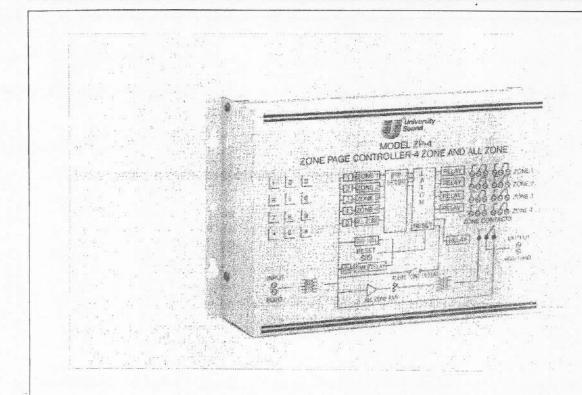


# **Model ZP-4**

# **Zone Page** Controller



- Expands paging to 4 zones and all-zone
- 120 volt AC or 24 volt DC
- 600 Ohm input matches standard PABX paging port
- Activates from paging phone touch pad tones
- Operates with single amplifier or separate zone amplifiers
- Amplifiers may be standard or talk-back
- 3 reset methods Auto voice sense, dial tone & external switch
- Ambient noise & dial tones automatically muted

- Wall mounted sturdy steel cabinet
- U.L. listed power pack included
- Manufactured in the U.S.A.

#### DESCRIPTION

The model ZP-4 Zone Page Controller expands a 600 ohm paging output port from a phone system (or suitable paging adaptor) to four zones and allpage, as selected by means of the tones from the touch pad on the phone used as paging source.

Zone control by the ZP-4 is made by means of four separate relays with double pole-double throw contacts.

These may be connected to switch

either amplifier inputs or outputs as needed to meet the requirements of the specified installation. The audio signal input and output of the ZP-4 in the "single zone" mode is through a 1:1 coupled 600 ohm transformer. This circuit may be used for either one-way or two-way paging. In the "all zone" mode, this transformer output is amplified to provide the 150 ohm source necessary to drive all four zones and may only be used as a one-way paging port.

Access time to the paging output is automatically terminated by the dial tone, otherwise, the access time is limited by a voice activated circuit which resets the unit 1 to 55 seconds after voice communication stops, or by means of manual

reset connections.

Ambient line noise and dial tone are automatically muted when not paging.

The model ZP-4 is housed in a sturdy wall mounted steel cabinet 10 1/2" wide by 6 3/4" high 2 3/4" deep with two metal flanges which permit surface wall mounting. A hinged service cover allows access for installation and adjustments. The entire unit is finished in a beige color baked enamel. Weighing only 3 lbs., the ZP-4 controller operates from 120 volts AC. 60 Hz with a power consumption of 16 watts or 24 volts DC at 400 ma.



#### SPECIFICATIONS I

INPUT

Impedance: 600  $\Omega$ Maximum Level: + 4 dBm Maximum: D.C.: 60 ma

OUTPUT

Impedance: 600 ohms (single Zone), 150 ohms (All Zone) Insertion Loss: - 3 dB @ 600 Ω,

-2 dB @ 150 Ω

Frequency response: 300-8000

 $Hz, \pm 2 dB$ 

RELAYS

Activation Frequency: DTMF Zone 1, 697 Hz + 1209 Hz Zone 2, 697 Hz + 1336 Hz Zone 3, 697 Hz + 1477 Hz Zone 4, 770 Hz + 1209 Hz All Zone, 941 Hz + 1336 Hz

Accuracy ± 2%

**CONTACT RATINGS** 

Resistive Load:

AC 50VA, DC 30VA

Inductive Load:

AC 20VA, DC 10VA

## **CONTROLS & SWITCHES**

Alert tone mode switch (internal) All zone variable output level (internal)

Voice sensitive reset circuit (variable reset delay)

INDICATORS

Power & Activation LED's

RESET

External

Switch closure

Dial Tone

350 Hz + 440 Hz

Silence Detect

1 - 55 Seconds (adjustable)

POWER REQUIREMENT

120 V AC, 60 Hz, 0.13A (AC power pack supplied), or

24 V DC. 400 ma

**DIMENSIONS & WEIGHT** 

Width: 10.5" (26.7 cm.) Height: 6.75" (17.1 cm.)

Depth: 2.75" (7.0 cm.) Weight: 3 lbs. (1.5 kg.)

Finish: Beige, 20 ga. steel

## ZONE PAGING ARRANGEMENTS

There are a number of methods to achieve zone paging; each depends on the function required and the physical nature of the installation. The relay contacts of the ZP-4 may be wired in any one of three methods: 1) switching the output of an amplifier to the speakers in each zone; 2) switching the paging signal to the input of an amplifier in each zone; 3) switching control circuits other than audio which activate zone equipment.

The advantage and disadvantages of each method should be evaluated in the initial design stage. Example: The cost savings advantage of using only one amplifier and switching its output may be outweighed by other considerations. These include the need for external relays on high wattage circuits, the necessity of very large wire on exceptionally long speaker runs, and background music interruption of non-page zones unless an additional music amplifier is included. On the other hand, the additional cost of separate paging units for each zone may be outweighed by the requirements of the installation. These would include the ability to use a phone pair to page over very long distances, or the ability to mix different types of functions in the same system such as talkback amplifiers and background music receivers.



# WARRANTY (Limited)

University Sound telephone interconnect products are guaranteed against malfunction due to defects in materials and workmanship for a period of one year beginning at the date of original purchase. If such a malfunction occurs, the product will be repaired or replaced (at our option) without charge during the period and under any limitations stipulated in the owner's manual for the individual product, if delivered, freight prepaid, to the University Sound service facility. The unit will be returned prepaid. Warranty does not extend to finish, appearance items, or malfunction due to abuse or operation under other than specified conditions, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than University Sound or it's authorized service agencies will void this warranty. A list of authorized warranty service centers is available from:

This warranty gives the customer specific legal rights, and there may also be other rights which may vary from state to state.

Applications and technical information for University Sound products:

> University Sound, Inc. 13278 Ralston Ave. Sylmar, CA 91342 (818) 362-9516

Specifications subject to change without

1989, University Sound, Inc.

Part Number 201-0004-00B Litho in U.S.A.



University Sound Inc.

13278 Ralston Avenue Sylmar, CA 91342-7607 Phone (818) 362-9516 FAX (818) 367-5292