

Encoder**FEATURES**

- Ideal for volunteer fire departments and other public safety applications
- Two-tone paging (GE, Motorola Quick Call II)
- Five-tone paging
- Built-in microphone for tone-and-voice pagers
- Programmable keyup delay
- Programmable cap code capacity
- Automatic transmitter keying and mic muting
- Single key re-page

INTRODUCTION

The Zetron Model 5 Communications Encoder is a compact low-cost desktop paging encoder for selective calling of two-tone and five-tone sequential pagers. A 12-digit high-quality keypad allows for manual entry of pager codes. A four-digit display indicates the number of the pager being called. The pager number remains on the display after the paging sequence is complete, allowing immediate re-page without reentry of the pager

number. Three LEDs indicate when the encoder is paging, transmitting, and when the microphone is open for the voice transmission to tone-and-voice pagers. The voice transmission can be made through the built-in electret microphone or through a normal desk microphone. The built-in microphone, which can also be used to make voice broadcasts over the transmitter, is equipped with automatic gain control for optimum voice pick-up. An additional feature for tone-and-voice pagers is an alert tone, which when selected, precedes the voice message to notify the recipient that a voice message is to follow. A choice of alert tones is provided. (For custom or Plectron pagers, use Zetron Model 15P.)

CONFIGURATION AND FEATURES

The Model 5 contains several programmable features to aid in system customization. By entering a special code on the 12-digit keypad, the encoder can be placed in the programming mode which allows the encoder to be configured for each type of pager being used.

For two-tone paging, the call size can be set to 100 or 1000, eliminating the need to enter one or more leading digits of the pager number. Tone groups can be selected for the 100-pager call size, or code plans may be chosen for the 1000-pager call size. The Model 5 can also signal five-tone pagers. The call size for five-tone pagers can be set to 100, 1000, 10,000, 100,000 or 1,000,000 cap codes. The tone series can be set to EIA, CCIR, or ZVEI signaling formats.

The programming mode also allows the selection of several features that enhance operation of the encoder. Such features include transmitter keyup delay, talk time duration, auto page, and internal/external microphone.

The keyup delay, to ensure that the transmitter is fully keyed before the first tone is sent, can be set to any value from zero to 2 seconds, in 0.1-second increments. The talk time duration for the voice portion of the transmission can be set to anywhere from zero to 59 seconds, in one-second increments. The talk time can be extended as necessary beyond the selected value by holding a key on the keypad or the PTT switch on the desk microphone.

Power is provided by a 12-volt wall transformer or the transmitter's +12V DC supply may be used. An optional 220V AC transformer is available.

SPECIFICATIONS

SYSTEM

Formats	Single format two-tone or five-tone. Mixed format, 10 leading digits. Alert tone. Disable leading digit
Two-Tone Capacity	100 or 1000 calls per leading digit (GE, Motorola Quick Call II)
Five-Tone Capacity	2- to 6-digit (100 to 1 million calls) per leading digit. Auto-Page ON or OFF
Key-Up Delay	0 to 2 seconds
Alert Tones	Five-beep or warble Selectable per format
Talk Time	0 to 59 seconds Selectable ON/OFF per leading digit May be extended by holding PAGE key
Talk Audio	From internal mic or external source
System Tests	Test tone sequences for transmit setup
Local PTT/Mic	Replaces local microphone. AGC for good quality audio
Display	4-digit, 7-segment readout. "Transmit", "Paging", and "Talk" indicators
Re-Page	Unit holds prior pager number in display for paging again by simply pressing PAGE

TWO-TONE

Tone Groups	Motorola Quick-Call II: 1,2,3,4,5,6,10,11 Quick-Call I: A, B, Z <u>excluding</u> 977.2, 1011.6, 1047.1, 1084.0, 1122.1, and 1161.4 Hz G.E.: A,B,C
Code Plans	Motorola-BCDEFGHJKLMNPQRSTUWV WY, MT; GE-X,Y,Z
Tone Timing	Eight standard timing selections
Diagonal Tone	None (group call), 569.1, 979.1, 742.5
Diagonal Placement	1st Tone or 2nd Tone

FIVE-TONE

Tone Series	EIA, CCIR, ZVEI
Call Size	2- to 6-digit entry
Preamble Strap	0 - 9, or no preamble
First Digit Strap	0 - 9
Second Digit Strap	0 - 9
Third Digit Strap	0 - 9
Dual Address	None, odd capcodes, or enter extra digit
Repeats	0 to 3

ELECTRICAL

Frequency Range	250-3500Hz, +/- 1.5dB max with pre-emphasis compensation
Frequency Accuracy	+/- 0.1%
Audio Output	Ground referred, impedance 600/6K-ohm selectable
Audio Level	Adjustable, -30dBm to +12dBm (0-4.4V pk-pk, adjustable into 600 ohms)
Tone Distortion	2% typical
Built-in Mic	Low distortion electret
Automatic Gain	Correct transmit level over 30dB range
PTT Output	Relay contact to ground; 1 A at 48V DC
Channel Busy Input	DC voltage or closure to ground (10K pull-up); lo < 1.0 volt, hi > 2.5 volts, selectable polarity
Power Supply	DC supply; 11-18 V DC at 350 mA max. Wall xfmr; 105-135V AC, 60Hz (P/N 815-9015) Wall xfmr; 180-250V AC, 50/60Hz (P/N 815-9027)
Operating Temp.	0 to +60 degrees Celsius
Size	2.5" H x 5.5" W x 4.8" D Desktop high-impact plastic case
Weight	10 oz.