ZETRON

MODEL 15

Multi-Format Encoder

FEATURES

- **Combines Digital and Analog formats in one unit**
- **Single key re-page of last page made**
- **Multiple pagers entered into keyboard stack**
- **Automatic transmitter keying and microphone muting**
- **Transmit inhibit input provides automatic channel monitor**
- **Custom two-tone paging tones, or Plectron format**
- **Serial Port supports Alphanumeric paging**
- **Single key access to stacked pages**
- **Keypad programmable for format setup**

INTRODUCTION

Model 15 Field-Programmable Encoder

The Model 15 is designed so that all setup parameters are keypad programmable and can be changed by a technician at the site to support any required system changes. The unit includes the Analog, Digital, and/or Custom Calls paging format packages. The installer can set up to 14 blocks of paging formats without having to contact Zetron for new firmware. This makes the Model 15 a good choice for most manual encoder applications.

OPERATION

The Model 15 encoder is designed for simple operation. Pages are entered with the sixteen button keypad and are displayed on a six character LED display for verification before being sent.

A special key is provided to clear an invalid entry or abort a page in progress. A page can be repeated simply by pressing the page key again as long as the last page code is still in the display. The paging cycle is always indicated in the display to eliminate confusion.

Stack Pages

An operator can select a programmed stack of pager codes by entering a single digit. These stacks can be changed in the field.

Alphanumeric Paging From A Computer

The Model 15 includes an RS-232 port and various cables are available to connect to a CRT or personal computer. This allows on-screen control and the entering and sending of alphanumeric text messages.

Alert Tones

This feature allows the user to send an audible alert (assuming the use of tone and voice pagers) following each page or stack of pages in the form of electronic siren, beeps, or hi/lo warble.

INSTALLATION

The installation of the Model 15 is straightforward. The encoders can be powered by a wall transformer or an external 12 VDC supply. The unit performs a self-test of the microprocessor circuitry when power is first applied.

With the M15 all connections are made on a screw terminal strip. Relays allow transmitter keying and microphone muting.

An input is provided for connection to a channel activity indicator, such as a COR signal, to inhibit the encoder until the channel is clear. A steady tone can be generated to facilitate transmitter deviation adjustments.

PAGING FORMATS

The Model 15 features analog, digital and custom paging formats.

Analog Formats

The Model 15 allows field selection and programming, from the front panel keypad, of any of the common analog paging formats. Formats included are Motorola, GE, Reach, 5/6 Tone, DTMF, HSC and others.

Digital Formats

The Model 15 includes POCSAG, GOLAY (GSC), Metro Pageboy, and NEC formats.

Custom Formats

The Model 15 is the ideal encoder for alerting nonstandard tones, including Plectron and Federal. The Model 15 allows the installer to program the custom frequencies in the field, without sending the unit back to Zetron and also lets the owner create stacks of pages that can be initiated with one or two keystrokes.

POCSAG

When using this format, a “digital capable” transmitter is necessary, as with other digital paging formats. Numeric messages may be entered from the keypad.

Metro Pageboy/ Metrx

This version of the Motorola 2-tone sequential paging tones and format has a four digit capcode and allows for higher capacity paging than the more typical codeplans. Group call is supported in this option as well.

SPECIFICATIONS (Refer to separate specifications sheet #005-1068 for Model 15T Pager Tester)

FORMATS

Tone Formats	Motorola or GE two-tone, Five/six tone sequential, Reach, 2805 Hz mobile phone dial, DTMF, 1500 Hz, Hexadecimal Sequential Code
Digital Formats	POCSAG numeric display, Motorola Golay numeric display, NEC tone only, NEC numeric display, POCSAG alphanumeric display, Golay alphanumeric display

CALL CAPACITY

Two-tone	100/1000-call and group call Multiple 1000-call plans
Five-tone	100/1000/10,000/100,000-call with optional preamble or dual address
Custom Calls	Random selection of tones and timing up to 200 calls
Reach	100/1000-call and group call
2805/1500/DTMF	3, 4, 5, 6, 7, or 8 digits
POCSAG	512, 1200, or 2400 baud data rate, Voice, 255 character Alphanumeric messages, 1 of 4 strappable function codes
Alert Tones	Automatically added at the end of the page sequence. Choice of beeps, sirens, or warbles

SPECIAL FEATURES

Display	Large 0.4" high, six digit, 7 segment readout
Page Indication	Display message
Voice Prompt	Display message (“talk” when appropriate)
Built-in Self Test	Comprehensive test on power-up. Mode for setting transmitter deviation. (Analog and Digital)
Re-page	Units holds prior pager number in display
RS-232 Serial Port	300, 600, 1200, 2400, 4800, 9600 jumper selectable baud rate.
Keyboard Stack	Allows the entry of a number of pager codes at one time from the keypad to be paged all at once
Field Programmable	The format configuration is fully programmable from the keypad. Menu prompts on the LED display

OPTIONS

Power Supply	115 VAC 60Hz Wall Transformer 220 VAC 50Hz Wall Transformer

ELECTRICAL SPECIFICATIONS

Output Frequency Range	250 - 3500 Hz +/- 1.0 dB maximum
Frequency Accuracy	+/- 1.0%
Audio Output	Single-ended. Adjustable, +5 dBm to -20 dBm (0-4 Vpk-pk into 600 ohms)
Tone Distortion	2% nominal from pure sine wave
Digital Output	+/- 0-7 VDC, adjustable, polarity selectable
Control Outputs	2 sets of SPDT contacts, rated at 1 A at 26 V AC; One for PTT, one for switching audio output between tone and microphone
Transmit Inhibit	Senses closure to ground
Power Supply	120 VAC +/- 15%, 48-62 Hz wall transformer 12 VAC rms or 12-14 VDC at 700ma maximum
Operating Temp.	0 to +65 degrees Celsius
Size	3.3"H x 8.2"W x 9.3"D Desktop high impact plastic case
Weight	19 oz.

Zetron, Inc. PO Box 97004, Redmond WA 98073-9704 USA

Ph: (425) 820-6363 Fax: (425) 820-7031 Email: zetron@zetron.com Web: http://www.zetron.com

European Office: Zetron, Inc. 27-29 Campbell Court, Bramley, TADLEY, Basingstoke, RG26 5EG, UK Phone: +44 1256 880663 Fax: +44 1256 880491

See Zetron price list for option pricing. Specifications subject to change without notice. Literature number: 005-0031K August 2003