

Miniature 8 Calls POCSAG Encoder Miniature 16 Calls POCSAG Encoder Part No: PE-800XS Part No: PE-800XH

\* PE-800XS is a "8 stand alone calls" input device.

\* PE-800XH is a "4x4 keypad calls" input device.

The Communication Powerful Model PE-800X with the 8/16 Calls POCSAG Encoder series is an USB microprocessor based products to be used for encoding the binary digital paging format known as POCSAG (CCIR RPC1). 8 or 16 Call Inputs on the PE-800X allow the device to generate 8 or 16 different address for alphanumeric message POCSAG paging transmissions.

The fine design in small size, low power consumption and advanced engineering has resulted to this product can be ideally for all base station, mobile and portable two-way FM radio application usages. Simple and fast programming by USB port thru P/C MS OS allows the radio service shop to define the 8/16 different address and message transmission contents by their own.



#### **Main Function**

- USB port programming
- Data rate 512/1200/2400bps program selectable
- POCSAG, standard format
- Normal Data/ Invert Data output select
- Positive Action/ Negative Action select
- small size and easy installation
- Low power consumption
- Wide Voltage operation from DC 6-20V
- Small Size: 45mm X 33mm X 5mm



J1 I/O Connector (1.25 mm X 14 Pin)

- $\odot$  1. A1 Trigger 1 (S type), Key pad X1 (H type)
- 💿 2. A2 Trigger 2 (S type), Key pad X2 (H type)
- 💿 3. A3 Trigger 3 (S type), Key pad X3 (H type)
- $\odot$  4. A4 Trigger 4 (S type), Key pad X4 (H type)
- $\odot$  5. A5 Trigger 5 (S type), Key pad Y1 (H type)
- $\odot$  6. A6 Trigger 6 (S type), Key pad Y2 (H type)
- $\odot$  7. A7 Trigger 7 (S type), Key pad Y3 (H type)
- $\odot$  8. A8 Trigger 8 (S type), Key pad Y4 (H type)
- • 9. GND
- ③ 10. Power V+ Input ( 6-15V)
- ① 11. +PTT (High to +5V for Active)
- $\odot$  12. -PTT (Low to GND for Active)
- 📀 13. NC
- 💿 14. Data Output

## 1. Operating Instructions

A POCSAG transmission is initiated by momentarily conducting one of the call inputs to ground. As soon as the PE-800X detects the ground action from one of the 8 call input lines, the PE-800X will activate the associated transmitter and generate the POCSAG digital transmission. For the paging transmission, each one of the 8 call inputs on the PE-800X can be individually programmed with different address and message data.

## 2. Installation Instructions

### +POWER Pin #10 (RED)

This wire should be connected directly to the filtered source of the continuous positive DC voltage in the range of +6V DC to +20V DC.

### GROUNG Pin #9(Black)

The Ground wire should be connected to a location inside the radio set. Which unit supply a DC power ground return to PE-800.

### +PTT OUTPUT High to TX Pin #11

To install the PTT Output line on PE-800, simply connect it to the PTT line inside the transmitter.

This Pin is High as the on-air of transmitter

### -PTT OUTPUT ground to TX Pin #12

To install the PTT Output line on PE-800, please connect it to the PTT line inside the transmitter.

This Pin is Low as the on-air of transmitter

### Normal Data output Pin #14

This output generates the POCSAG Normal digital output, The most common place to connect this line is directly to or just prior to the modulation stage in the transmitter.

### Call Input 1-8 Pin #1-#8 (PE-800S only)

The 8 inputs are used as a trigger input to initiate the POCSAG transmission. Any one of the eight inputs may be pulled to ground to start the POCSAG transmission. A momentary pull to ground is required sequentially. Connect one pole of the switch to ground and the other pole to the desired call input on the PE-800. Each call input is capable of generating an unique POCSAG address and messages.

## 8 Key Switch Input (PE-800XS only)

The Key switch Input are used a 1 by 1 switch for 8 calls input application



# Key Pad Input 4 X 4 keyboard Pin #1,2,3,4 and Pin#5,6,7,8 (PE-800XH only) The Keypad Input are used a 4 X 4 keyboard for 16 calls input application



## 3. Programming

A. Connect the USB plug into the PE-800X USB port



B. Install the *Wireless Call* CD Rom execution file and then run the programming software. Example Programming Screen as below

Wireless Call				
Pager No. Capcode Tone Message Type Send Message				
1	1234567 A 💌 Numeric	• [0101]	Data Rate	
2	1234568 A 💌 Numeric	• [0102]	1200bps  hps	
3	1234569 A 💌 Numeric	• [0103]	Preamble	
4	1234570 A 💌 Numeric	• [0104]	1023 💌	
5	1234571 A Vumeric	• [0105]	bits	
6	1234572 A Vumeric	• [0106]	Repeater	
7	1234573 A 💌 Numeric	▼ [0107]	time(s)	
8	1234574 A Vumeric	▼ [0108]		
9	1234575 A 💌 Numeric	• [0109]		
10	1234576 A 💌 Numeric	• [0110]		
11	1234577 A 💌 Numeric	• [0111]		
12	1234578 A 💌 Numeric	• [0112]	Read	
13	1234579 A 💌 Numeric	• [0113]		
14	1234580 A Vumeric	• [0114]	Write	
15	1234581 A 🗸 Numeric	• [0115]	0.01	
16	1234582 A 💌 Numeric	• [0116]	Quit	

1. Pager No.(Call Input)

For PE-800XS unit, please just enter the Pager No.1-8 row only.

For PE-800XH unit, please enter the Pager No.1-16 row.

2. Cap code

This is the 7 digits pager address. And it must be same with the used receiving pager.

3. Tone Alert

This is the pager's tone alert functions.

A= 1 sound per 1 Sec, B= 2 sound per 1 sec, C= 3 sound per 1 sec, D= 4 sound par 1 sec

If your use pager is an alphanumeric pager. Then please set on "D" feature

4. Message type

Please set the same type message with your used numeric or alphanumeric pager.

5. Send Message

This is for the message Data.

6. Date rate

This should also be set on the same speed data with the used Pagers.

And the baud rate is in either 512bps or 1200bps or 2400bps type.

7. Preamble

Please set this function at the 600 bits above. And it might not work properly under the 576 bits.

8. Repeater

This is for the same 1-4 times repeat message set-up with a single Red button depressing.

Speci	fication
Description	Part No: PE-800X(S/H)
Data Format	POCSAG CCIR
Data Rate	512bps/1200bps/2400bps
Data output Level	0V- 5V
Memory Slot	8 or 16
Message Type	Numeric or Alphanumeric
Repeat Call	1-4 time
Preamble	2-2400 bits
Power source	DC 6-20V
PCB Size	45mm X 33mm X 5mm.
Power consumption	Standby 15uA TX 11mA
Weight	8 grams.



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