



## On-site Wireless Paging System (POCSAG)

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**M-909X 8 individual buttons plus 1 group call button**

**M-916X 16 individual buttons**

### Operation Manual



## **INTRODUCTION**

The M-909X and M-916X on-site paging system are designed to directly page waiters, nurse, and employee with a simple button depressing. And the system's individual call button feature can transmit the pre-programmed messages to the specified single or group pager users. Once the paging is activated. The red LED, which is located at the top of the case button, will be ON to confirm the air messages transmission is on the way.

The M-909X and M-916X are a single-board synthesized message transmitter that operates in the 410-490MHz, 868MHz, 915MHz, 931MHz, frequency bands.

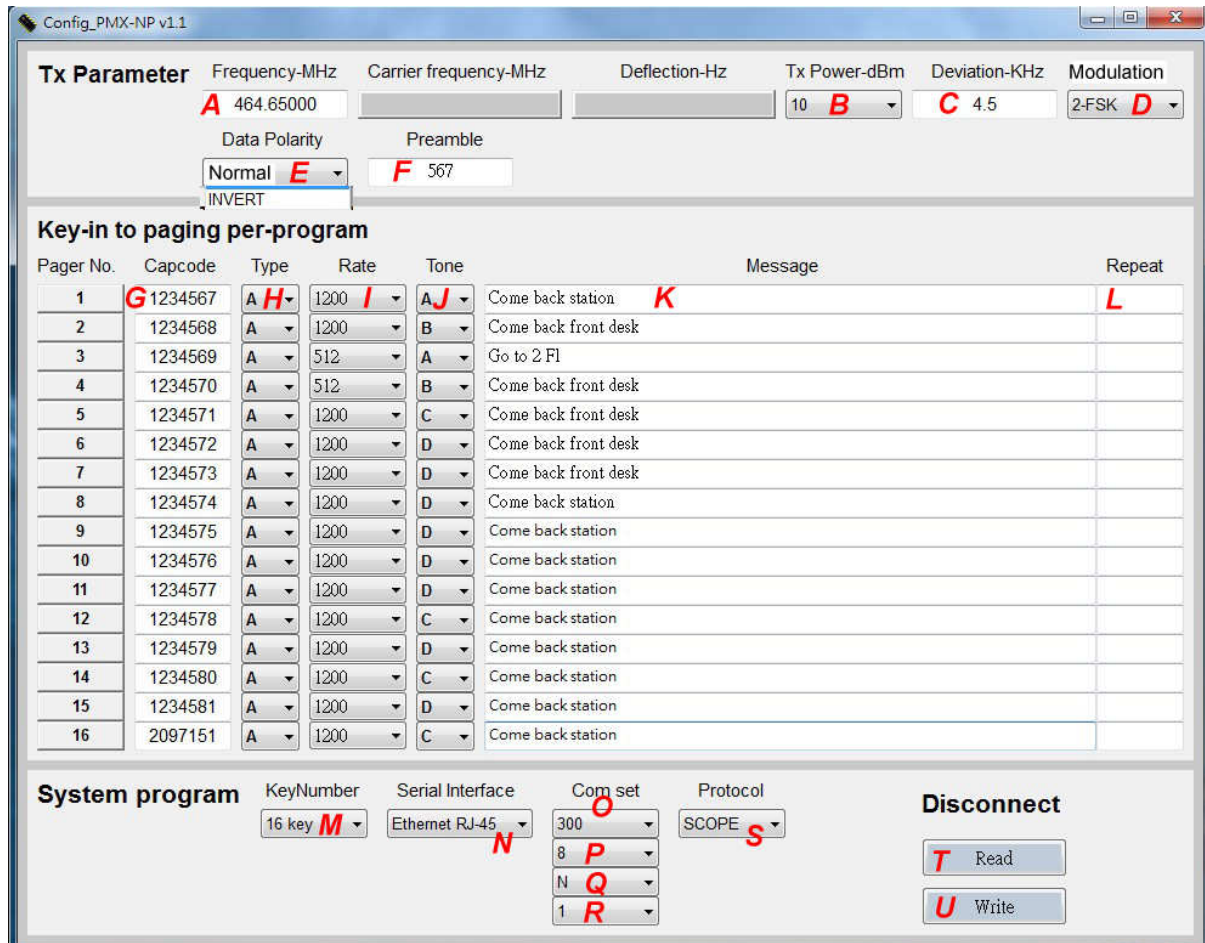
The system encoder data, which are the capcode, speed and messages etc, can be sent out to the air by the tone-only pager, numeric (4-bit) pager, alphanumeric (7-bit) pager formats, using the POCSAG paging protocol.

### **How to operate the M-909X and M-916X**

1. Place the antenna on the BNC Jack at the top of M-909X or M-916X.
2. The antenna must be by the vertical position to obtain the optimum performances.
3. Depress the button of button number to page the designated waiter.
4. The red LED will be lighted ON during the paging period.

# PROGRAMMABLE FEATURES

The photo screen below describes the M-909X and M-916X programmable features. This programmer is used for all WDIIT M-series synthesized paging systems. The features N,O,P,Q,R,S, are not available for the M-909X and M-916X items.



↑Figure 2. Programming screen

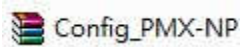
## Programmable and set up

While programming, the M-909X and M-916X DC plug must be off and disconnected. Please just connect the USB cable into the PC USB port only.

## Tips to set up the programming parameters

1. Turn off the Power. (Pull out the DC plug from M-909X, M916X DC Jack)
2. Connect the USB cable plug into the M-909X or M-916X USB port
3. Connect the another side USB cable plug into the P/C or N/B computer
4. Install the wireless call series software CD execution file into your P/C or N/B
5. Click **[PMX-NP]** icon to run the programming software.

Install the programming AP execution file

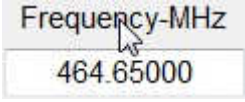
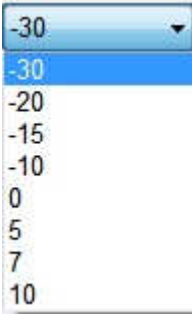

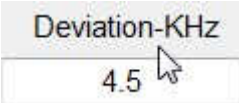

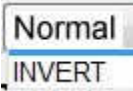
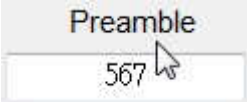


If show Disconnect

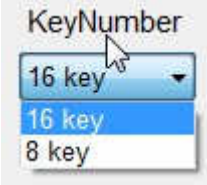


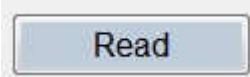
Check USB Jack again.

## Example Programming Screen as Below:

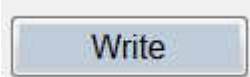
Item	Function	Value
A- Carrier Frequency 	Radio Frequency set-up key-in your own frequency	410.000 to 490.995 850.000 to 890.995 910.0000 to 931.9375
B- TX RF Power 	Transmitter RF Power set-up The % Just for reference must connect with RF power meter for the actual true output power adjustment.	
C- FSK Deviation 	Frequency Deviation set-up	Normal 4.0K or 4.5K (Max) for POCSAG or 2 level data rate
D- Modulation type select 	Frequency modulation set-up	Normal 2-FSK (2 level FSK) for POCSAG
E- Data Polarity 	Data Polarity Normal or Invert set-up	Normal = 01010101--- Invert = 10101010--- General select Normal
F- POCSAG Preamble: 	Preamble for pager power saving	Normal set 576 bits or more.

<p>G- Page number of copcode</p> <table border="1"> <thead> <tr> <th>Pager No.</th> <th>Capcode</th> </tr> </thead> <tbody> <tr><td>1</td><td></td></tr> <tr><td>2</td><td></td></tr> <tr><td>3</td><td></td></tr> <tr><td>4</td><td></td></tr> <tr><td>5</td><td></td></tr> <tr><td>6</td><td></td></tr> <tr><td>7</td><td></td></tr> <tr><td>8</td><td></td></tr> </tbody> </table>	Pager No.	Capcode	1		2		3		4		5		6		7		8		<p>Pager copcode address set-up</p>	<p>No 1-8 or 1-16 pager copcode can be all same or all difference 7digital POCSAG address range from 0000008 to 2097151.</p>
Pager No.	Capcode																			
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
<p>H- Pager display type selection</p> <table border="1"> <thead> <tr> <th>Type</th> </tr> </thead> <tbody> <tr><td>A</td></tr> <tr><td>A</td></tr> <tr><td>N</td></tr> </tbody> </table>	Type	A	A	N	<p>Numeric or Alphanumeric Display Pager set-up</p>	<p>N for numeric display type, A for alphanumeric display type.</p>														
Type																				
A																				
A																				
N																				
<p>I- Data Rate</p> <table border="1"> <thead> <tr> <th>Rate</th> </tr> </thead> <tbody> <tr><td>1200</td></tr> <tr><td>512</td></tr> <tr><td>1200</td></tr> </tbody> </table>	Rate	1200	512	1200	<p>Data speed set-up</p>	<p>POCSAG data speed and baud rate in 512bps or 1200bps Must to be same as pager.</p>														
Rate																				
1200																				
512																				
1200																				
<p>J- Pager alert tone</p> <table border="1"> <thead> <tr> <th>Tone</th> </tr> </thead> <tbody> <tr><td>A</td></tr> <tr><td>A</td></tr> <tr><td>B</td></tr> <tr><td>C</td></tr> <tr><td>D</td></tr> </tbody> </table>	Tone	A	A	B	C	D	<p>Pager alert tone select</p>	<p>A=1beep per Sec, B=2beeps per Sec, C=3beeps per Sec, D=4beeps per Sec.</p>												
Tone																				
A																				
A																				
B																				
C																				
D																				
<p>K- Pre-program Message</p> <table border="1"> <thead> <tr> <th>Message</th> </tr> </thead> <tbody> <tr><td>Come back please</td></tr> </tbody> </table>	Message	Come back please	<p>Pre-programmed Message</p>	<p>All ASCII words</p>																
Message																				
Come back please																				
<p>L- Paging repeater</p> <table border="1"> <thead> <tr> <th>Repeat</th> </tr> </thead> <tbody> <tr><td>4</td></tr> </tbody> </table>	Repeat	4	<p>Repeater call times for each paging</p>	<p>1=1 call 2=2 time call 3=3 time call 4=4 time call</p>																
Repeat																				
4																				

M- Key input button number select  	Key input	select [16 key]
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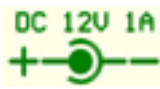


Read : Reading the programmed contents from the M-909X/M-916X devices.



Write : Write the programming contents into the M-909X/M-916X devices.

## Installation



1. DC-12V IN : 10V-13.8V In Minimum 1A.
2. Mini USB for the System programming
3. RF output to antenna or RF amplifier.

IF RF power under 2 W, the antenna can be used by the robber wipe antenna.

IF RF power over 2W, the unit must use the external antenna, which must be Set the 1.5 meters away from the M-909X/M-916X unit to avoid the interference.

## Mount

Mount on the wall by screw max 5  $\phi$  mm





## Specifications

Item	M-909X	M-916X
Pager No.	9 Keys	16 keys
Frequency:	400-470 MHz Synthesized, 868-915 MHz Synthesized	
Paging format:	POCSAG.	
Pager Baud rate:	512bps / 1200bps / 2400bps.	
Message type :	ASCII	
Channel Spacing:	6.25K / 12.5K / 25K. Frequency Synthesized by USB programming	
Modulation:	NRZ NFSK, for POCSAG	
Deviation:	3.5-4.5Khz	
Stability:	±10ppm.	
RF output power:	0.1~7 W (programmable)	0.1~4 W (programmable)
RF output connector:	BNC female (SMA female type option)	
P/C Interface:	USB 2.0 and RS-232 9600bps	
Ethernet:	RJ-45 TCP/IP 10/100M	
Operation temperature:	-25℃ ~ 70℃	
Power Supply:	DC 12V 1A(Minimum)	
Size:	120 mm X 110 mm X 25 mm.	
Model Weight:	0.8KGs. include AC 100~240 to DC 12V 2A switching power adapter.	

Programmed Note

Pager No.	Capcode (address)	Data rate	Message
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			