PX-888D SOFTWARE USER'S MANUAL

Date: April 2008

version: 1.0

(Note: PX-888D software can program PX-888A and PX-888D, but PX-888A software can program PX-888A only)

A) Open PX-888D(V3) software, you will see that as follow,

<u>F</u> ile <u>E</u> dit <u>P</u> rogram Setup <u>V</u>											
	?										
PUXING ×	💋 Char	mel Informati	ion								
PUXING											
- Product Information - Channel Information	CH	Rx Frequency	Tx Frequency	QT/DQT Dec	QT/DQT Enc	Chnnel Name	Power	W/N	Scan Add	PTT ID	E
-Optional Features	1										
- DTMF	2										
MSK	3	<u> </u>									_
- 2-Tone Key Assignment	4	8		1			-		- y		-
ney hast gament	5										
	6										
	8				1		-				-
	9						-		-		-
	10										
	11										-
	12										-
	13										
	14	6 S							1		
	15										
	16										
	17										
	18										
	19				-			-			
	20										

Picture 1

Click Edit/Product Information, you will see that as picture, you can select PX-888D from TYPE, then select the frequency you want: 136-174MHZ, 350-390MHZ, 400-470MHZ. Click OK to confirm.

Product Info	rmation	×
Type Setting		
Туре	PX-888D	
Frequency	136-174MHZ	
ОК	Cancel	

B) Programe the channel information (Channel Information)

1) RX/TX FREQUENCY: input frequencies of transmitting or receiving, the frequency step are 2.5KHZ(LOW)、5KHZ(MIDDLE)、6.25KHZ(HIGH)。

- 2) QT/DQT DEC、QT/DQT ENC: QT/DQT(CTCSS/DCS) DECODE AND ENCODE
- 3) CHANEL NAME: To edit the alphanumeric channel name.
- 4) POWER: high power and low power.
- 5) W/N: wide band(25khz) and narrow band(12.5khz)
- 6) SCAN ADD, you can program the channel to scan list
- 7) PTT ID : There are four types to send the ANI CODE
 - 1) OFF: no ANI code sent.
 - ②EOT: Send at the end of the transmit

③BOT : Send at the beginning of the transmit

(4)BOTH: Send both in the beginning and in the end

8) BUSY LOCK: NO、 CARRIER ONLY and QT/DQT TONE.

Note: When select QT/DQT as busy lock, radio can transmit if carrier and tone are same separately, radio cannot transmit if carrier is same but the tone is different.

9) OPT SIGNAL: DTMF、MSK、2 - TONE。

10) MORE: Add something for OPT SIGNAL.

C) OPTIONAL FEATURES

Click OPTIONAL FEATURES, you will see OPTIONAL FEATURES dialog box as follow,

Back Light	Auto	Scan Mode	ТО
Back Light Color	Purple	Squelch Level	5
Display Mode	1	Step	25k
Key Lock	Manual	Time-Out Timer(TOT)(s)	Off
Priority Channel	1	Voice Annunciation	Chinese
Vox Gain Level	Off	PTT ID	TID
requency Mode	On	PTT ID Type	DTMF
MSK Туре	MSK-II	Beginning of Transmit	
]Keypad Lock]Scrambler Activa	Battery Saver	End of Transmit	

图 2

- 1) BACK LIGHT
 - ① OFF: BACK LIGHT is closed whenever you are operating or not.
 - ② AUTO: BACK LIGHT is on the state of AUTO. It will be ON when operating and OFF after stopping operating in 30 seconds.
 - ③ ON: BACK LIGHT work all the time.

2) BACK LIGHT COLOR.

There are three types to select: purple, orange and blue.

3) DISPLAY MODE

There are three types of CHANNEL MODE.

 \Leftrightarrow CHANNEL MODE:

1) Show the channel name and channel number.

CH 005 CH-005

CH 5: indicate channel name, it can be edited by user.

CH-005: indicate the current channel is the fifth channel.

2) Show the channel name and the frequency

CH 5 005 455.00

CH 5: indicate channel name, it can be edited by user.455.00: indicate the frequency of the current channel.

3) The transmit and receive frequency of current channel

1A
16) 161

R 455.00: indicate the receive frequency of current channel. T 455.00: indicate the transmit frequency of current channel.

4) FREQUENCY MODE

R470.975 T470.975

R 470.975: indicate the receive frequency T 470.975: indicate the transmit frequency

You can press VFO/MR to switch between Channel Mode and Frequency Mode. Hold down ENTER and turn on the power, the radio can enter or exit the double channel mode.

5) Double Channel Mode



A CH – 013: This channel can both receive and send. CH – 010: This channel can receive only.

CH – 013: This channel can receive only.

B CH – 010: This channel can both receive and send.

You can press MENU+PTT to switch between A and B.

4) KEY LOCK

MANUAL: User can lock or unlock the buttons by the keypad.

AUTO: The keypad will lock by itself if you have no operation in 30 seconds, you should hold on the "*"key to unlock the keypad.

5) PRIORITY CHANNEL

You can select one channel from 1 to 128 channels, if you select the fifth channel to be priority channel, it will scan the fifth channel always then other channels, for example:5-2, 5-3, 5-4, 5-5, 5-6.....

6) VOX GAIN LEVEL

You can set the VOX GAIN LEVEL from 0 to 9 rank_{\circ}

7) FREQUENCY MODE: ON/OFF

When the frequency mode is off, the radio will only show the Channel Mode, not show the frequency mode.

8) KEYPAD LOCK(different with Keylock)

If you select this function, only PTT、 SIDE KEY and channel selector are available. All other keys are disabled. (you can also long press and hold "*"and "#")The difference between KEY LOCK and KEYPAD LOCK is that you can't enable pressing the buttons by keypad , you have to use the software to disactive that.

9) BATTERY SAVER: it means you open this function if you select it .

10) SCRAMBLER ACTIVATION: It means you open the scrambler function if you select it.

11) BEEP: The keypad will sound alert tone if you select this.

12) SCAN MODE

①TO (Time-operated scan): The radio will lock on a busy channel for a period of 5 seconds then continue scanning other channels.

②CO (Carrier-operated scan): The radio will stop scanning when receive a signal then keep on the same frequency until there is no activity.

③SE (search scan): the radio stops on a busy channel and exits the scan mode.

13) SQUELCH LEVEL: 0-9 adjustable

14) SETP: 5K/6.25K/10K/12.5K/25K

15) TIME-OUT TIME

The range of TX limited time is OFF-270S. If you select the 30S, the radio will stop transmitting after 30 seconds transmitting.

16) VOICE ANNUNCIATION: OFF, CHINESE, ENGLISH.

17) PTT ID

 $\textcircled{1}\mathsf{D}\mathsf{ISPLAY}\;\mathsf{PTT}\;\mathsf{ID}$: It will display the PTT ID on radio's screen when transmit if you select this.

②PTT ID TYPE: DTMF、MSK

③BEGINNING TRANSMIT (set the PTT ID at the beginning of transmit)

④END TRANSMIT (set the PTT ID at the end of transmit)

D) DTMT

 $\label{eq:click} \text{Click DTMF}, \ \text{you will see DTMF dialog box},$

1) ENCODE, as follow,

DTMF		\times
Encode Decode CallList	1	
DTMF Speed(digit/s)	6 .	
First Digit Delay Time(ms)	200	
First Digit Time(ms)	0 .	
* and # Digit Time(ms)	0	
🔽 SideTone		



DTMF SPEED: Transmit DTMF speed FIRST DIGIT DELAY TIME: FIRST DIGIT TIME: * AND # DIGIT TIME(MS):

SIDE Tone:

2) DECODE as follow,

DTEF 🔀
Encode Decode CallList
ID Code 1005
Group Code A
Stun 🔽 Stun Activation
Stun Code
Stun Code Response Tx inhibit

图 3.2

ID CODE: Radio's ID, the ANI code of DTMF

GROUP CODE:

STUN ACTIVATION: The radio hasn't been killed if you select this.

STUN CODE:

STUN CODE RESPONSE:

Two types: TX INHIBIT,TRANSCEIVER INHIBIT(BOTH TX & RX INHIBIT). 3) CALL LIST

DTHF			×
Encode	Decode	; CallList	
	Num	Fast Call List	
	1	1005	
	2	1004	
	3	1003	
	4	1AAA	
	5	AAAA	
	6		
	7		
	8		
	9		



E) MSK

Click MSK, you will see the picture as follow

ISK	×
ID Code	A. B. C. D
Num	Call List
1	A, B, C, D
2	123A
3	345B
4	
5	
6	
7	
8	
9	
ок	Cancel
	图 4

Each radio get only one ID CODE.

F) 2-TONE

Click 2-TONE, you will see TONE dialog box, click ENCODE, you will see the picture

The first delay time(s)	0.5	÷	Num	Tone1 Fre	Tone2 Fre
110 1101 00119 (110(0)	1		1	2000.0	1000.0
ne second delay time(s)	0.5	-	2		
	1		3		
ong tone delay time(s)	1.0	÷	4		
			5		
Tone interval time(ms)	1000	-	6		
	1		7		
Tx rise delay time(ms)	100	-	8		
			9		



THE FIRST DELAY TIME THE SECOND DELAY TIME LONG TONE DELAY TIME TONE INTERVAL TIME TX RISE DELAY TIME SHOUT BEEP TONE

Click DECODE, you will see that as picture as follow,

Iow Ione			×
Encode Decode			
2Tone 1 2Tone 2 2To	one 3 2Tone 4	2Tone 5 2Tone 6	2Tone 7 2Tone 8
A Tone(HZ)	2000.0 🛨	B Tone(HZ)	1000.0 🛨
The first delay		The second delay	
time(s)).5 📩	time(s)	0.5 ÷
Interval time(s)	1.0	Long tone delay	0.5 ÷
		time(s)	100

图 5.2

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Pleas note the first delay time, the second delay time and tone interval time should be same separately on Encode and Decode.

The tone1 fre and tone2 fre on ENCODE must be same as those(A tone, B tone) on DECODE

examples

Two pieces of two way radios was programmed as follow,

	View <u>H</u> elp												
D 📽 🖬 🔰 📢 🎒	?												
PUXING ×	💋 Chan	nel Informat:											
E PUXING													
Product Information	CH	Rx Frequency	Tx Frequency	QT/DQT Dec	QT/DQT Enc	Chnnel Name	Power	W/N	Scan Add	PTT ID	Busy Lock	Opt Signal	Mo
- Channel Information - Optional Features	1	136.00000	136.00000	None	None	CH 1	High	Wide	Yes	Both	QT/DQT	None	>>
DTMF	2	155.00000	155.00000	67.0	67.0	CH 2	High	Wide	Yes	Both	QT/DQT	None	>
MSK	3	136.00000	136.00000	None	None	CH 3	High	Wide	Yes	BOT	Off	2-Tone	>
2-Tone	4	136.00000	136.00000	None	None	CH 4	High	Narrow	Yes	Off	Off	2-Tone	>
Key Assignment	5	155.00000	155.00000	None	None	CH 5	High	Narrow	Yes	Both	Off	MSK.	>
	6	174.00000	174.00000	None	None	CH 6	High	Narrow	Yes	Both	Off	DTMF	>:
	7	165.12500	165.12500	67.0	67.0	PUXING	High	Wide	Yes	Off	Off	MSK.	>
	8	166.22500	166.22500	151.4	151.4	XING	High	Wide	Yes	Off	Off	DTMF	>
	9	167.45000	167.45000	241.8	241.8	PUXING	High	Wide	Yes	Off	Off	None	>
	10	168.55000	168.55000	D023N	D023N	XING	High	Wide	Yes	Off	Off	None	>

-. Channel Information

The two pcs two way radio can communicate when both the frequency and the Opt Signal are the same.

2) BUSY CHANNEL LOCKOUT

 \approx When we select the CARRIER ONLY, if the first radio is calling the second radio on channel 1, the second radio only can receive but not transmit on this channel.

☆when select QT/DQT TONE

(1)If the value of the two radio (QT/DQT DEC and QT/DQT ENC) are the same, the first radio are transmitting on channel 2, and the second radio not only receive but also transmit on this channel..

②If only one of the value (QT/DQT DEC and QT/DQT ENC) is different, then when the first radio is transmitting on Channel 2, the second radio can only receive but not transmit on this channel.

3) Power

 \approx Switch the synthesis test equipment to TX SET, when we select the low power we will see 0-2 (W) from the equipment. When we select the high power we will see above 4 w from the equipment. You can change the power as follow,

 $(\ensuremath{\texttt{l}}\xspace)$ high power: click the menu bar [PROGRAM] then HIGH POWER DEBUG, you will see ,



图 7

Page 7 of 11

You can adjust the high power from 1 to 250 by the scroll bar, you also can see PWH199 from the LCD of the radio.

②low power: click the menu bar [PROGRAM] then LOW POWER DEBUG, you will see ,

w Power Debug		
Min 🔳		▶ Max
Current Position:	60	Cancel

图 8

You can adjust the high power from 1 to 200 by the scroll bar, you also can see PWH60 from the LCD of the radio.

3)PTT ID (We can press PTT key to send PTT ID directly, it will sound "dadada du")

rightarrow OFF: no send

 ${\not\! \propto} {\sf EOT:}\,$ send at the end of the transmiting

ightarrow BOT : send at the beginning of the transmiting

 \Rightarrow BOTH: both send at the beginning and the end of the transmiting

Click the menu bar [EDIT] then OPTIONAL FEATURES, you will see

Back Light	Auto	Scan Mode	ТО
	1 martine and a second		1
Back Light Color	Purple	Squelch Level	5
Display Mode	1	Step	25k
Key Lock	Manual	Time-Out Timer(TOT)(s)	OFF
riority Channel	1	Voice Annunciation	Chinese
Vox Gain Level	OFF	PTT ID	
vox Gain Level	Jon	🔽 Display PT	TID
requency Mode	On	PTT ID Type	DTMF
Keypad Lock	🔽 Battery Saver	Beginning of Transmit	
Scrambler Activa	ation 🔽 Beep	End of Transmit	

Pic 9

We can use the PTT ID frame on picture 9 to set how to display the PTTID ,same as press"MENU+0", then press ENTER to set if show the ANI or not

\precsim , TONE (TONE FUNCTION SAME AS SQUELCH FUNCTION)

The radio will exit the tone call by itself and soud "dong long"if you didn't press PTT to transmit during 30 seconds after sending tone to call.

A, B, C correspond to the key:

 $\begin{array}{cccc} \text{MENU} & \text{A} & \text{ENTER} & \text{B} & \text{VFO/MR} & \text{C} \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & &$

 $end{2}$ -TONE: Select the channel got two tone (Channel4), press the side key 2 to make the two tone call . It will sound " $d\bar{u} \ d\bar{u} \ d\bar{u} \ d\bar{u} \ d\bar{u}$ " if receive the correct 2 –tone.

•2-TONE set

Click the MENU [EDIT]/TWO TONE, then click ENCODE to picture10, click DECODE to picture11.

Iow Ione			×	Tow Tone 🗙
Encode Decode The first delay time(s)	0.5 +	Num Tonel Fre 1 2000.0 2	Tone2 Fre _	Encode Decode 2Tone 1 2Tone 2 2Tone 3 2Tone 4 2Tone 5 2Tone 6 2Tone 7 2Tone 8
The second delay time(s) Long tone delay time(s)	0.5 ÷	3 4 5		A Tone(HZ) 2000.0 - B Tone(HZ) 1000.0 -
Tone interval time(ms) Tx rise delay time(ms)	1000 ÷	6 7 8 9		The first delay 0.5 \vdots The second delay 0.5 \vdots 10.5 \vdots
☐ Short beep tone		9 10 11 12		Interval time(s) 1.0 time(s) 0.5 time(s) 1.0 time(s)
	F1 1 0			

图 10

图 11

You can enter the frequency from 300HZ to 3 KHZ in TONE1 FRE and TONE2 FRE on picture10, the time you set to the Encode should correspond to the time set to the Decode.

 \Rightarrow MSK: Select the channel got the MSK (Channel5), press key side 2 to use the MSK

call. It will sound " $d\bar{u} \ d\dot{u} \ d\ddot{u} \ d\ddot{u}$ if receive the correct 2 -tone

 \Rightarrow We can use the MSK tone to get the function of selective call.

Click channel5/MORE to picture12, click [EDIT]/MSK to jump picture13, Suppose we have two radio which got the tone information as follow

	IISK	×
Channel Edit 🗙	ID Code 3456	
	Call List	
Channel 5	Num Call List	
	d <u>1</u> 1234	
Optional Signal MSK	2 2345	
-1	3 3456	
-Optional Signal(MSK)	4 4567	
optional Signal (Willier)	5 5678	
Call 3	6 6789	
	7 7890	
	8	
	9	
OK Cancel	OK Cancel	
	P	_



pic 13

picture12, the CALL 3 in the dialog box corresponde to the NUM3 on picture13, we can call only when receive the CALL LIST 3 sent by another radio. So we can set the content on picture 12 and picture 13 to get the function of selective call.

☆ DTMF:

• Operate: ①Select the channel got DTMF (Channel6), press key side 2 until

display"CALL ? "on LCD, then press the shortcut key to call DTMF code

O Press ENTER key to display "DTMF IN ----", enter the ID CODE $\ ,$ then press PTT key.

•We can get the function of single call, multi-call, group call by DTMF. Click [EDIT]/DTMF, then click DECODE to jump picture14, click CALLIST to jump picture15

DTHF	DINF	X
Encode CallList	Encode Decode CallList	
ID Code 1002	Num Fast Call List	
	1 1002	
Group Code B	2 B001	
_ Stun	3 BBBB	
Stunt	4	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5	
Stun Code A12345678	6	
	7	
Stun Code Response Transceiver inhibit	8	
	9	
		-

Pic 14

pic 15

① Single Call: Suppose NO.1 radio to call NO.2 radio, this channel got DTMF, press side key 2, it will display"CALL ? "on LCD, then press shortcut key which have set to be the code of other body's, you can call NO.2 radio.

group call: picture14, ID CODE is
 GROUP CODE is
 B

And group code is 1BBB, so if only the first code is 1 in group B will ring. Group

Call:	as picture 14,ID CODE is	1002		
	GROUP (CODE is	В	

Group Code is BBBB, no matter what is the ID CODE, if only GROUP CODE is B, it will respond.

③ Stun Activation

DIEF 🗙
Encode CallList
ID Code 1005
Group Code A
Stun Stun Activation
Stun Code
Stun Code Response Tx inhibit
l l



- ④ Operate: A. Press PTT key to enter the STUN CODE of another radio, the radio will be stunned activation once received the correct stun code; B. press"ENTER"key to enter the stun code of another radio then press PTTkey, the radio will be stunned activation once received the correct stun code.
- S TX inhibit; Transceiver inhibit, TX inhibit, the radio been stunned activation can not transmit. Transceiver inhibit, the radio been stunned activaton can not transmit and receive.
- 6 Side Key (Click Menu [Edit] to set)
 - a) Option Signaling Call
 - b) Emergency Call
 - c) Send 1750HZ signal
 - d) Squelch Off Momentary

Note: SIDE KEY not only got one function of above but also got the function as follow: 1) Press MENU+SIDE KEY 2 to enter FM Radio Receiver; 2) Hold on MENU+SIDE KEY 2,open the power to open the Self-Programming mode; 3) SIDE KEY 2 stand for "D". When we use the tone call ,we should set the side key to be Option signaling Call first.