

Preliminary

RP3600 Series Field Programming Manual



GENERAL INFORMATION

Introduction

This manual contains information about field programming through the front keypad of the RELM Wireless RP3600 Series Portable radios. This manual is intended for use by experienced technicians familiar with similar types of commercial grade communications equipment. It contains service information and data for the equipment.

The following precautions are recommended for personal safety:

- DO NOT transmit until all RF connectors are secure and properly terminated.
- SHUT OFF and DO NOT operate this equipment near electrical blasting caps or in an explosive atmosphere.
- Only qualified technicians should maintain this equipment.

Description

The RP3600 series radios are self-contained FM Radios covering the frequency range of 145MHz to 174MHz for VHF and 440 MHz to 175MHz for UHF. The radios are multi-channel and digitally synthesized using a single TCXO for frequency control. The RP3600 series incorporate an EEPROM for the storage of channel frequency, CTCSS Tone, DCS Code, Two-Tone, and Dual Tone Multiple Frequency/Automatic Numeric Identifier (DTMF/ANI) encode information. Flash Memory is used to conveniently store and upgrade the operating system. Soft key switches can be programmed to control back light, Scan Add/Del, channel scan, DTMF store and send, repeater talk-around, hi/low transmit power as well as other useful operating functions. Status and channel information is displayed over a liquid crystal display. Connectors are provided at the side of the unit for speaker microphone and other optional accessories.

Accessories

A wide variety of optional accessories are available for the RP3600 Series radios. Contact your RELM Wireless dealer for complete information.

License Requirements

This equipment must be licensed by the Federal Communications Commission (FCC) before it may be used. Your RELM Wireless dealer can assist you in filing the appropriate application for the FCC, and will program each radio with your authorized frequencies and signaling codes.

Technical Assistance

If you need technical assistance, contact a RELM Communications service technician:

RELM Wireless Corporation
ATTN: Customer Service
7100 Technology Drive
West Melbourne, FL 32904
Phone: (800) 422-6281
FAX: (321) 953-7986
Email: service@RELM.com

Programming Mode



Note

Before programming can be performed through the front keypad, the following needs to be set by the PCRM3600 editor on the “Optional Feature” Menu:

- ✓ With Digital Keypad
- ✓ Manual Tune Enable

- 1) Turn on the power on while holding down programmable function **[B]** and **[C]** keys until the radio enters Programming Mode.



- 1) Press the  key to enter the main menu.
- 2) Select your desired setting item.
- 3) Press the  key to enter the selected item or press the menu **[C]** key to exit from the selected item and return to the main menu.

The setting item is displayed on the top line while the setting options or entered settings are displayed on the bottom line.

① Adjusting the settings

Press the **[◀]** or **[▶]** keys to scroll through the setting menu.

② Entering a name or alias


Refer to the respective appendix for character data input.

③ Entering a number


Enter the digits through the numeric keys. The cursor automatically moves to the last digit

entered. Press the **【◀】** key to clear an unwanted digit. No operation occurs when

【▶】 key is pressed.

- 4) Press the  key to save the settings or press the menu **【C】** key to exit without saving the settings.

Key Description

 key: enter the menu item/save the settings

【C】 key (menu): exit from the current menu and return to the upper menu, or exit from the current menu item without saving the settings.

【◀】 key: scroll backwards through the menu items.

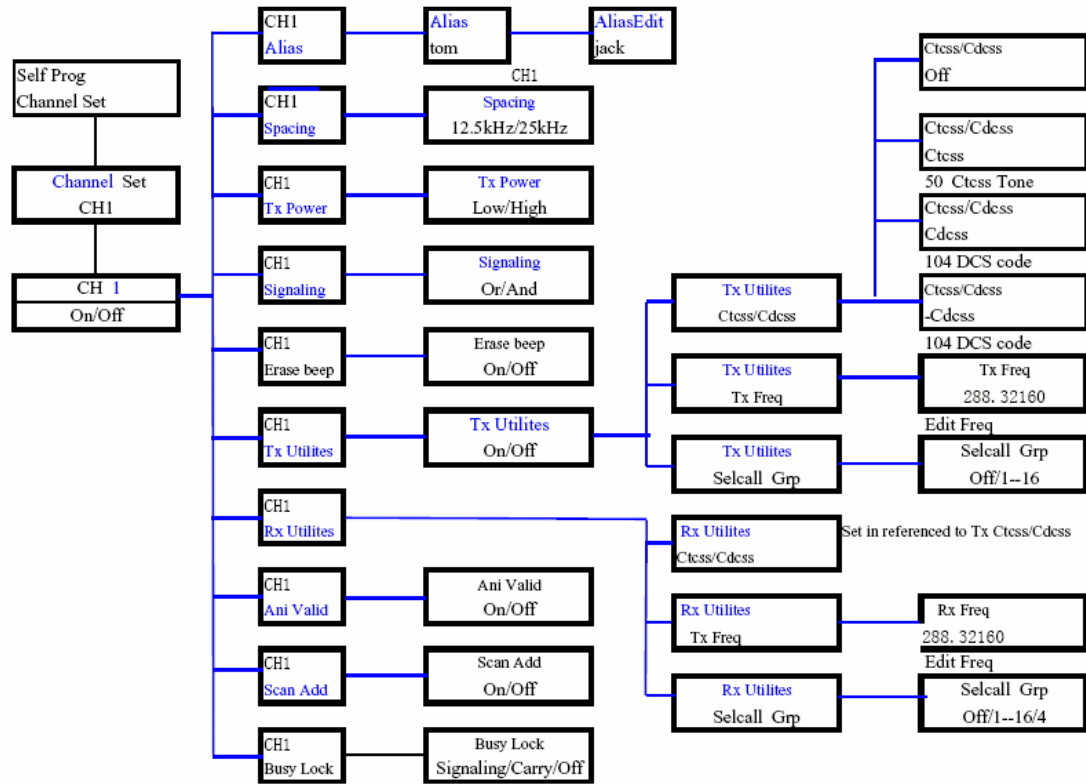
【▶】 key: scroll forwards through the menu items.

Main Menu (setting items)

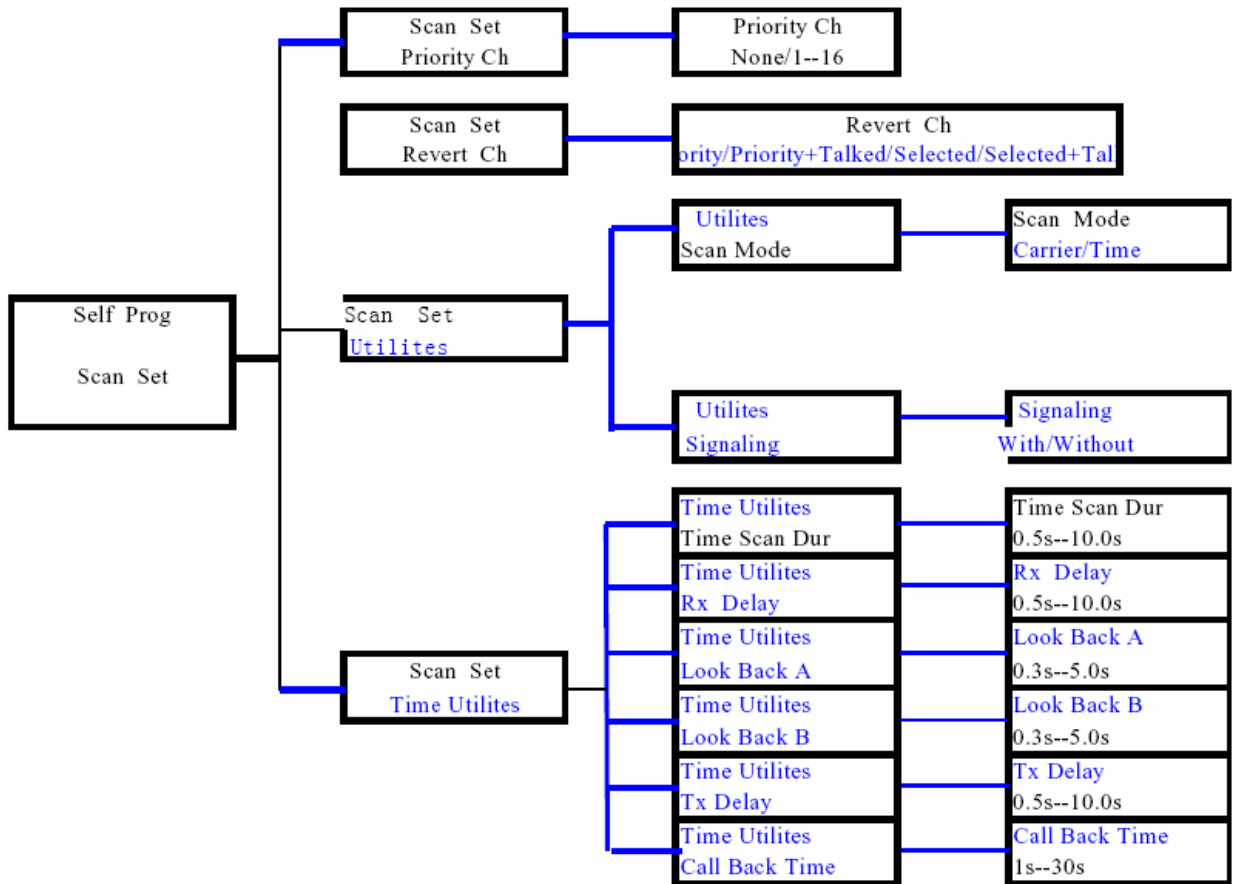
No.	Setting Item	LCD Display	Description
1	Channel set	CH Set	Channel settings
2	Scan set	Scan Set	
3	Key Assignment	Key Assignment	Programmable key assignment
4	ANI set	ANI Set	Connect ID, disconnect ID and emergency ANI
5	Selective signaling	Signal Selection	Select signaling system and common parameters
6	Signaling set	Signaling Set	2-tone/ 5-tone settings
7	System set	System set	System settings, language, zone
8	Prompt tone	Prompt Tone	Tone frequency settings
9	Record set	Record Set	Record settings
10	TOT	TOT	TOT rekey time, TOT reset time, TOT pre-alert time

The submenus are shown as the following appendixes. Changes may occur in the submenus as a result of the software upgrading. Please refer to the radio LCD display during your menu operation. Follow the programming software to make settings.

Appendix 1 Channel Set



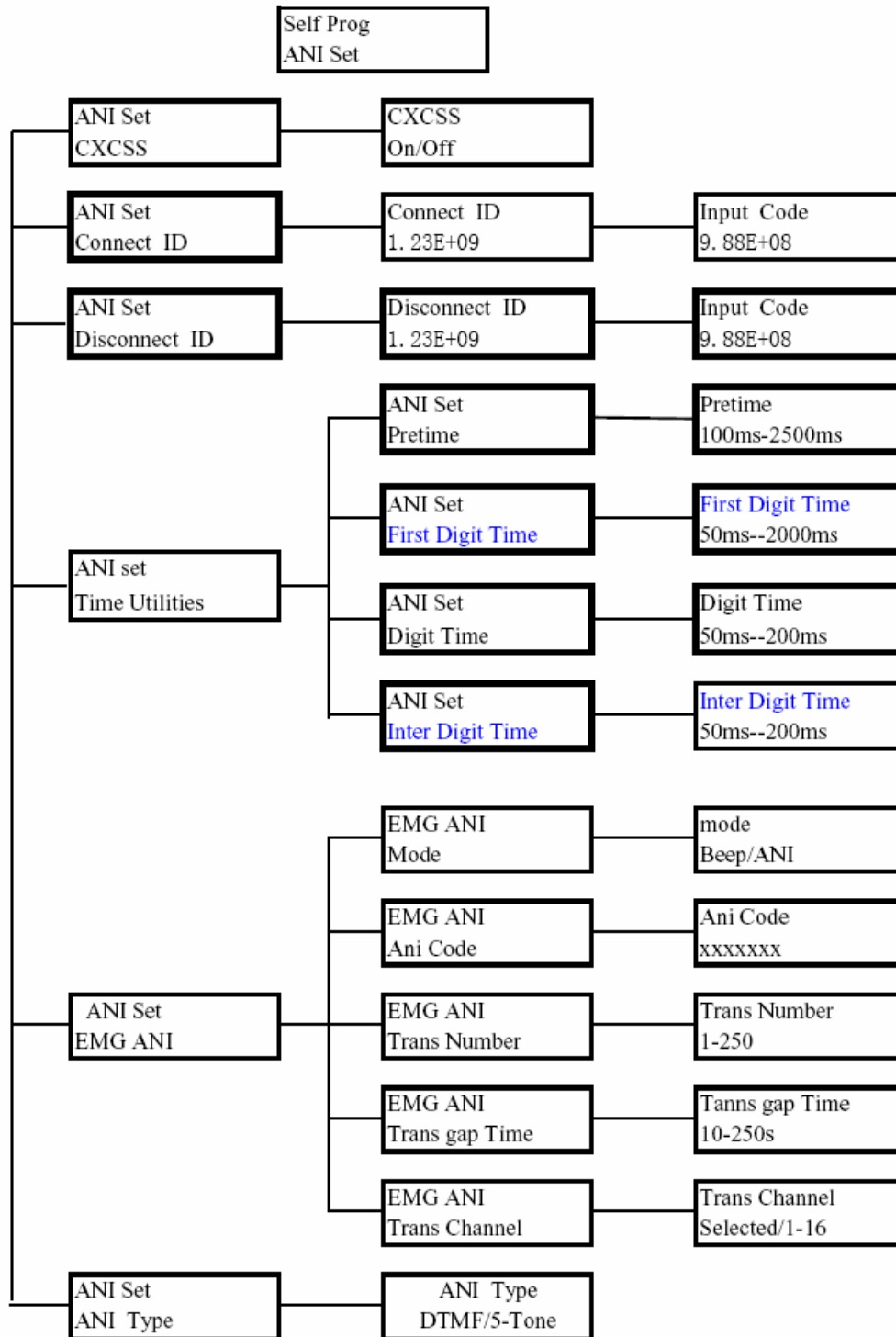
Appendix 2 Scan Set



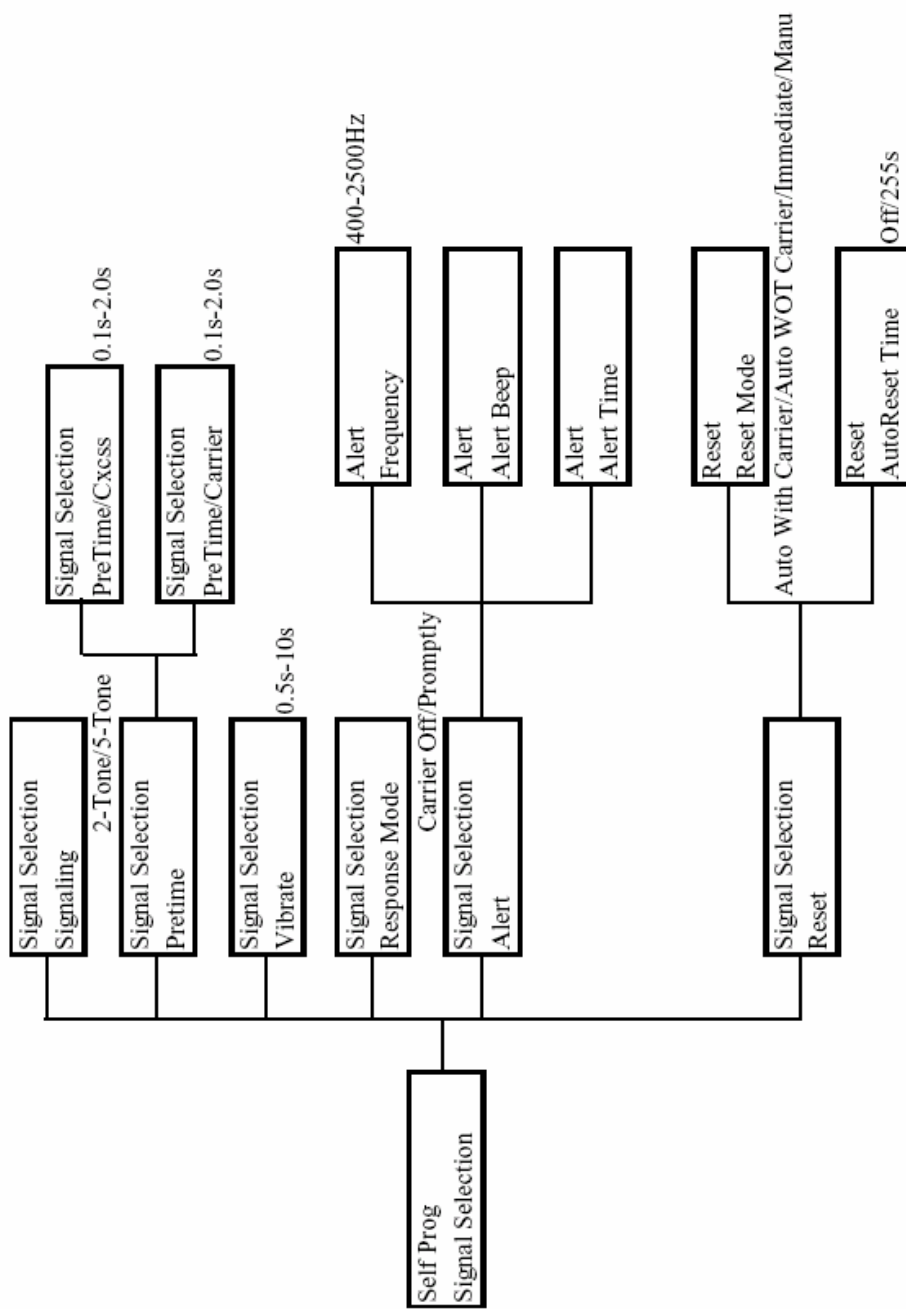
Appendix 3 Key Assignment

Key Assignment A Short Press	Unassigned/Scan/Nuisance Del/Toggle Power/Taklaround/Reverse/Radio Call/Scan/Selecall/Group Call/Vibrate/Record/Play/Del Current MSG
Key Assignment A Long Press	Unassigned/Scan/Nuisance Del/Toggle Power/Taklaround/Reverse/Radio Call/Scan/Selecall/Group Call/Vibrate/Record/Play/Del Current MSG
Key Assignment B Short Press	Unassigned/Scan/Nuisance Del/Toggle Power/Taklaround/Reverse/Radio Call/Scan/Selecall/Group Call/Vibrate/Record/Play/Del Current MSG
Key Assignment B Long Press	Unassigned/Scan/Nuisance Del/Toggle Power/Taklaround/Reverse/Radio Call/Scan/Selecall/Group Call/Vibrate/Record/Play/Del Current MSG
Key Assignment C Short Press	Unassigned/Scan/Nuisance Del/Toggle Power/Taklaround/Reverse/Radio Call/Scan/Selecall/Group Call/Vibrate/Record/Play/Del Current MSG
Key Assignment C Long Press	Unassigned/Scan/Nuisance Del/Toggle Power/Taklaround/Reverse/Radio Call/Scan/Selecall/Group Call/Vibrate/Record/Play/Del Current MSG
Time Utilites Long Press Time	Long Press Time 500ms---5000ms

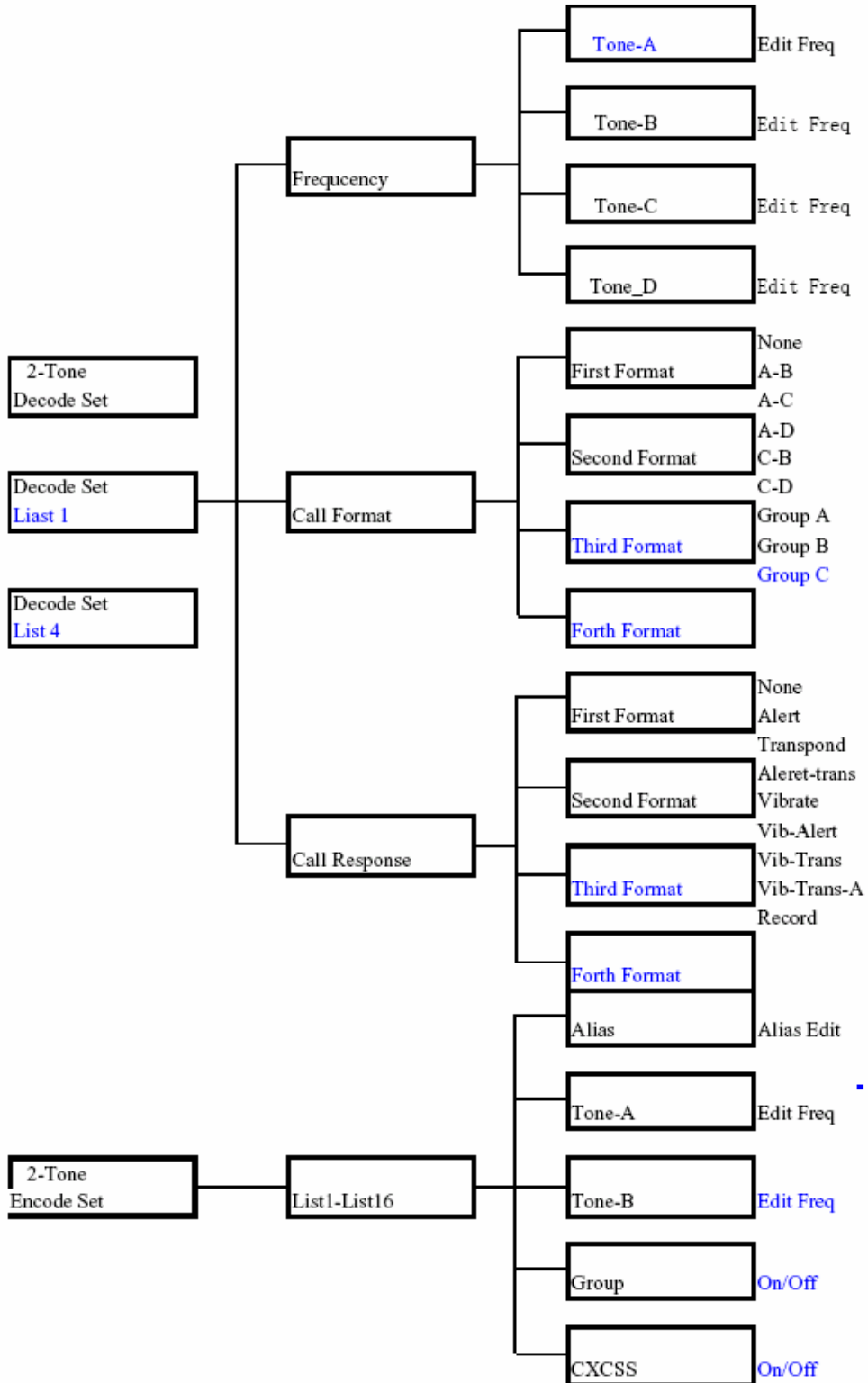
Appendix 4 ANI Set



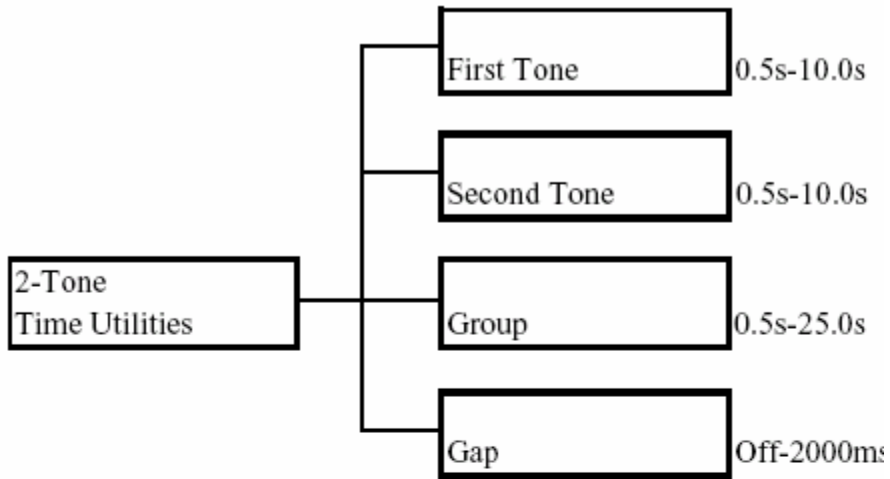
Appendix 5 Selective Signaling



Appendix 6 2-Tone Signaling (1)



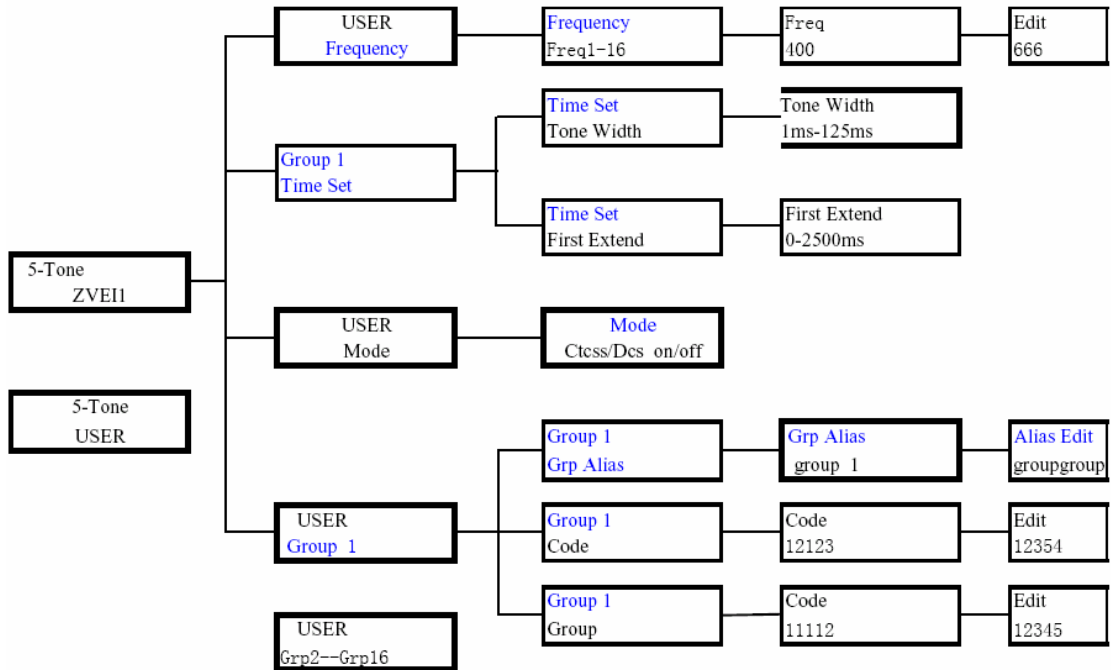
Appendix 7 2-Tone Signaling (2)



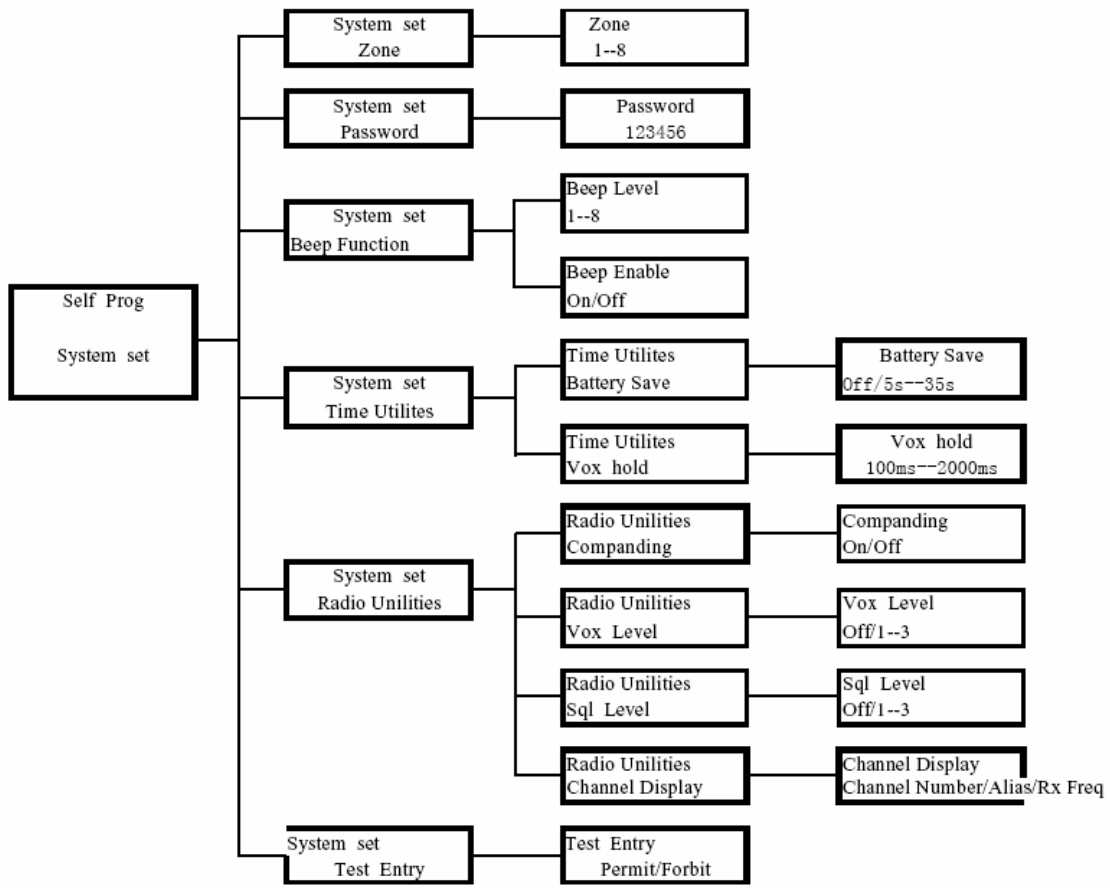
2-Tone Tx Mode Off/Sidetone/Short Tone

2-Tone Short Tone Time 100-2500ms

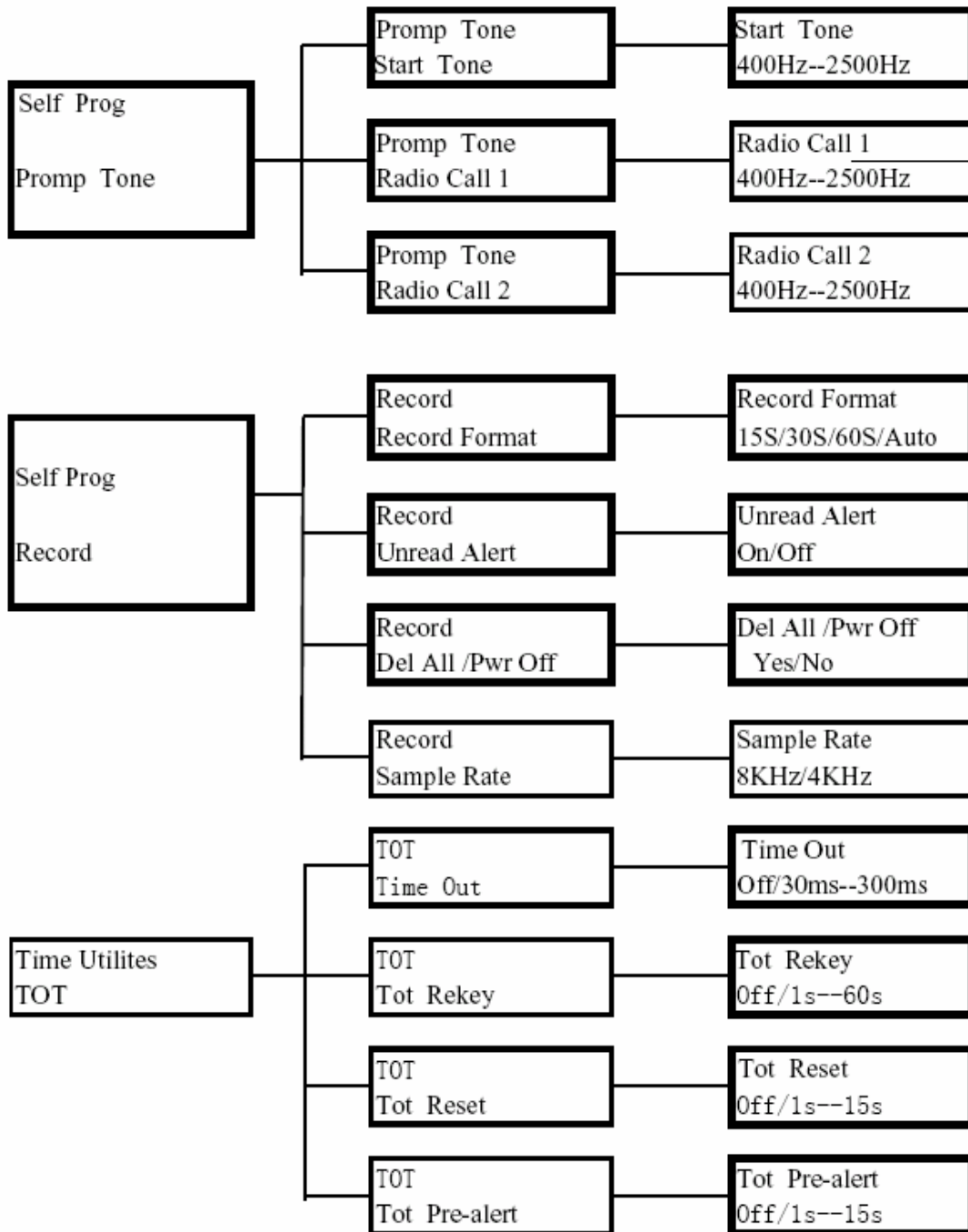
Appendix 8 5-Tone Signaling



Appendix 9 System Set



Appendix 10 TOT, Prompt Tone and Record Set



Clone Modes

Cloning can be performed through “wire” or “wireless” modes. The “wire” mode cloning requires the CCRP3 cloning cable.

Wire Clone Mode

Connect the source radio and the target radio with the clone cable (CCRP3)

◆ On the Source radio:

- 1) Turn the power on while holding down PTT and programmable function key **【B】** simultaneously. After two seconds, a BEEP sounds indicating that the radio enters Clone Mode.



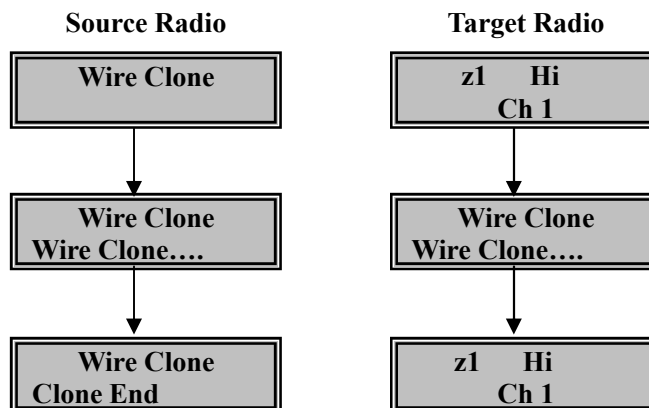
- 2) Press the programmable function **【B】** key to enter “Wire Clone” Mode.

◆ On the Target radio:

- 3) Turn On the power.

◆ On the Source radio:

- 4) Press the PTT button to begin data cloning. While cloning, the LED indicator on the source radio will flash red and the LED indicator on the target radio will flash green. When data is being transferred to the target radio, “Wire Clone...” appears on the display. When all data is received, “Clone End” appears on the display. When data cloning is completed, the target radio automatically returns to User Mode.



- 5) When data cloning is completed and another radio needs to be cloned, change out the target radio and press the PTT button again to start another cycle of cloning.

Wireless Clone Mode



◆ On the Source radio:

- 1) Turn the power on while holding down PTT and programmable function key **【B】** simultaneously. After two seconds, a BEEP sounds indicating that the radio enters Clone Mode.

Clone Mode

- 2) Press programmable function **【C】** key to enter “Wireless Clone” Mode.

Tx/Rx-Freq

- 3) Enter your desired Tx frequency used for wireless cloning through the numeric keypad, then press the  key to confirm; or directly press the  key to use the initial frequency.

Tx/Rx-Freq
4xx.xxxx



◆ On the Target radio:

- 4) Turn the power on while holding down PTT and programmable function key **【B】** simultaneously. After two seconds, a BEEP sounds indicating that the radio enters Clone Mode.

Clone Mode


- 5) Press programmable function **【C】** key to enter “Wireless Clone” Mode.

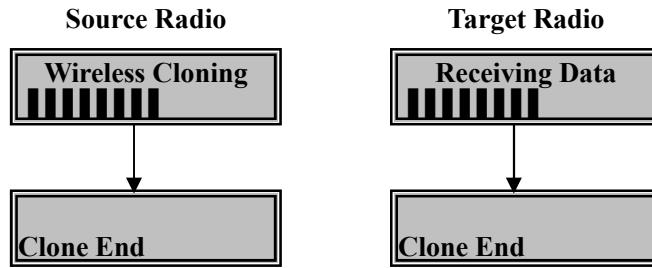
Clone Mode

- 6) Enter your desired Tx frequency used for wireless cloning through the numeric keypad, then press the  key to confirm; or directly press the  key to use the initial frequency.

Tx/Rx-Freq
4xx.xxxx

◆ On the Source radio:

- 7) Press the PTT button to start data cloning. “While cloning, the LED indicator on the source radio will glow red and the LED indicator on the target radio will glow green. When data is being transferred to the target radio, status bars “” appears on both displays and a beep sound will be heard from the target radio.



- 8) When data cloning is completed and another radio needs to be cloned, change out the target radio and perform steps 4 – 7.

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