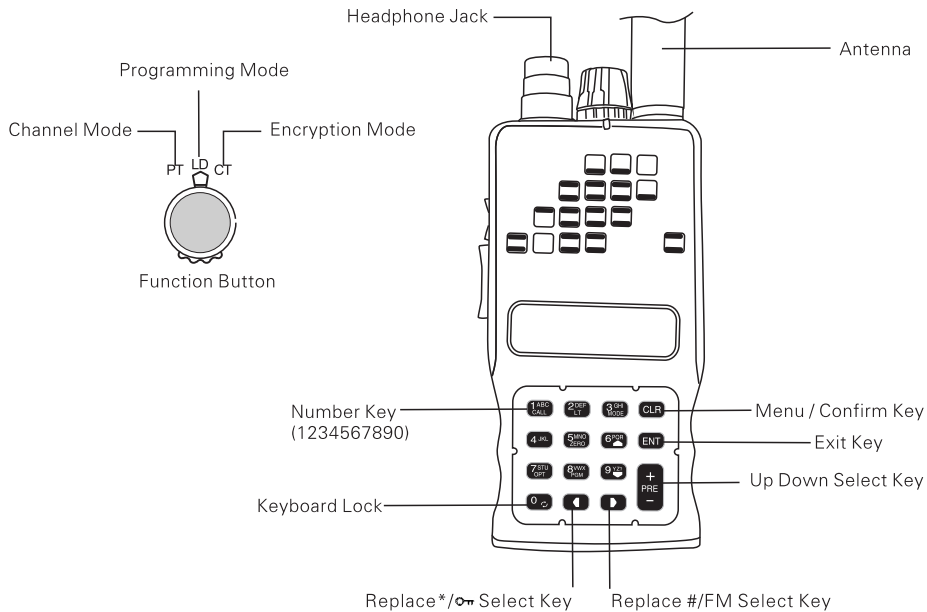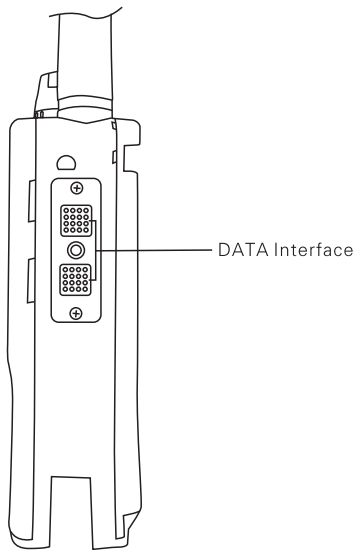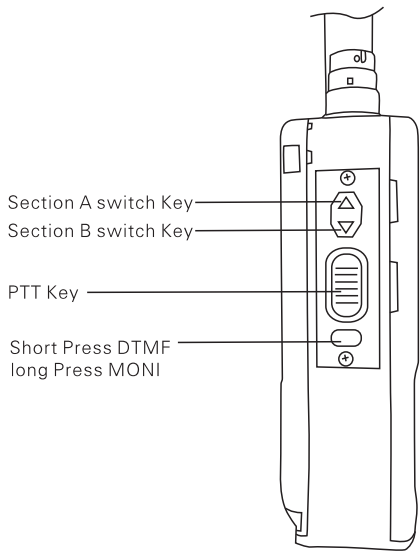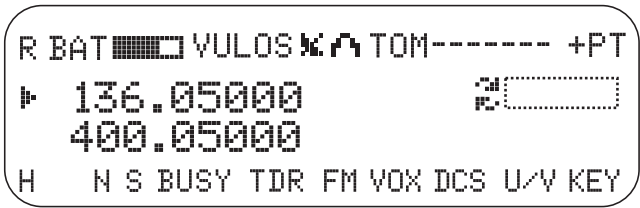# TCA-152A Walkie -Talkie Manual

Main Function Features

- Dual Band, Dual Display, Dual Receive (V/V, U/U,U/V Option), Two Way Voice Output At The Same Time
- Repeater Function (U /V OR V / U)
- Moving Coil Microphone
- ANI Identification
- DTMF Dual Tone Multiple Frequency
- All Call / Group Call / Select Call
- CID(Caller Identification)
- Remote Stun
- Remote Kill
- VOX
- CTCSS / DCS
- Wide / Narrow Band Select
- Urgent Alert
- High / Slow Power Select
- GPS

Headphone Jack

Antenna

Programming Mode

Channel Mode

Encryption Mode

PT LD CT

Function Button

Number Key
(1234567890)

Menu / Confirm Key

Exit Key

Up Down Select Key

Keyboard Lock

Replace*/⊶ Select Key

Replace #/FM Select Key

Section A switch Key

Section B switch Key

PTT Key

Short Press DTMF
long Press MONI

DATA Interface

R BAT▮▮▮▮□ VULOS ✂🏠 TOM------- +PT

▶ 136.05000
  400.05000
H   N S BUSY TDR FM VOX DCS U/V KEY

LCD Display Description

Icon	Corresponding Meaning
🔋▭	Receive Signal and Power Indicator
H/L	Transmit Power in Current Channel Or Edit Channel Indication
N	Narrow Instruction in Current Channel Or Edit Channel Indication
S	Save Battery Function On Indication
BUSY	Channel Busy Indication
TDR	Open Dual Standby Function
FM	FM On Indication
VOX	VOX Function On Indication
DCS/CT	Current Edit Channel Or Current Transmit Channel Select DCS/CT Indication

Icon	Corresponding Meaning
U/V	Repeater Function on Indication
KEY	Key Lock
BAT▉▉▉▉□	Battery Capacity Indication
🛰	GPS Indication
⌒	Headphone Jack Indication
+—	When Full Frequency, Current Edit Channel or Transmit Channel Offset Frequency Indication
▶	When Standby, Current Edit Channel Indicator, Menu Set Selection Interface During Menu Operation

Selectable Function Brief Introduction

No.	Screen Display	Selectable Setting	Brief Introduction
01	SCAN		Scanning
02	VOX	OFF/1/2…5	VOX Switch
03	VOT	0.5S/1.0S…3.0S	VOX Delay Time(s)
04	POWER	HIGH/LOW	Output Power Select
05	SQL	0~9	Squelch Level
06	D.WAIT	ON/OFF	Dual Standby Select
07	LED	ON/OFF/AUTO	Background Light
08	BEEP	ON/OFF	Prompt Voice Switch
09	VOICE	CHINESE/ENGLISH/OFF	Prompt Voice Indicator
10	ANI	ON/OFF	ANI Personal Identification Switch
11	RX.SAV	ON/OFF	Battery Save Mode
12	N/W	WIDE/NARROW	Band Setting
13	ROGER	ON/OFF	TX Ends Prompt Voice Switch
14	AUTOLK	ON/OFF	Auto Key Lock
15	MIC.MD	ON/OFF	Moving Coil Microphone
16	BCLO	ON/OFF	Busy Channel Lock Out
17	S~D	ON/OFF	Offset Direction Setting
18	OFFSET	010.000····.384.000	Offset Frequency Setting
19	STEP	5.00K/6.25K/.../50K	Step Frequency Select
20	OPNSET	LOGO/DC/MSG	Open Setting

Selectable Function Brief Introduction

No.	Screen Display	Selectable Setting	Brief Introduction
21	PTT−ID	OFF/SOT/EOT/BOTH	Push−To−Talk ID Set
22	PONMSG	−−−−−−−	Power On Message Edit
23	TOT	30/60/.../270/OFF	Time−Out Timer
24	SCANS	CO/SE/TO	Scan Mode
25	DW	ON/OFF	Monitoring Transceiver When FM Radio is on
26	C−CDC	OFF/67.0/69.3/.../D754I	CTCSS / DCS Set
27	R−CDC	OFF/67.0/69.3/.../D754I	Receiving CTCSS / DCS Code Set
28	T−CDC	OFF/67.0/69.3/.../D754I	Transmitting CTCSS / DCS Code Set
29	NAME	ON/OFF	Channel Name Display Edit
30	CHNAME	−−−−−−−	Channel Name Edit
31	RELAY	ON/OFF	Repeater Switch
32	RPT−RL	0.5S/1.0S/.../4.0S	Repeater Transmitting Delay Set
33	RPT−SPK	ON/OFF	Repeater Speaker Switch
34	RPT−PTT	ON/OFF	Repeater PTT Switch
35	GPSNET	ON/OFF	GPS Set
36	DST	ON/OFF	DTMF Side Signalling Switch
37	TX.SEL	EDIT/BUSY	Priority Channel Transmitting Set
38	STE	ON/OFF	Sound Tail Elimination Set

Shortcut Menu Operations Instruction

1. In Standby, Press 【ENT】,Enter Channel Mode In Turn→Full Frequency Mode.

2. Press 【CLR】 + 【1ABC CALL】 at the same time, then open the power, enter the Initialization all setting of full frequency mode

3. Press 【CLR】 + 【2DEF LT】 at the same time, then open the power, Enter The Initialization All Setting of Channel Mode

4. In Standby, Long Press 【◼】 2 s, open FM Mode, repeat the step to turn off the FM Radio.

5. In Standby, Long Press 【◀】 2s, Keyboard Lock by hand, repeat the step to unlock keyboard.

6. In Standby, Press 【CLR】 + 【0⟲】 Enter the Remote Alarm, Press PTT to cancel alarm.

7. Press A/B For master / deputy channel selection, the symbols of liquid crystal display," ▶ "director channel is master channel.

8. Short press DTMF / MONI, call up the stored DTMF code group

9. Long press DTMF / MONI 2s open Squelch, release DTMF / MONI close squelch

Operating instructions for band switching

Band Switch Turn into 3 parts, function as follows,

First Part: Channel Mode

Second Part: Programming Mode, when radio do program by computer, band switch dial on this part.

Third Part: Voice Encryption, when radio dial this, the Voice Encryption is open.

Basic Function Description

Open / Close Power

Clockwise rotation Volume/Switch locator, open the power will hear the"Click" sound, Potentiometer counter clock wise until hear the"Click" is close the power.

Adjust the Volume

Adjusting the Potentiometer clockwise, will increase volume, adjusting it by counterclockwise, will reduce volume.

Keyboard Operation

● In Full Frequency Mode, enter channel frequency or FM frequency by Keyboard.

● In channel mode, the keyboard inputs is the channel number of the stored channels.

Start FM Radio

In standby mode, press 【🔘】 2 seconds to start FM Radio mode, in FM Radio full frequency mode, you can press keypads to input FM Radio frequency directly or through 【 + 】 / 【 – 】 buttons to adjust FM Radio frequency, until clear FM radio signal has been received ; In FM Radio channel mode, you can also input the channels number of the stored channels to select.

Note: If you have no idea of the local FM Radio frequency, then use Scan function to scan local FM Radio frequency. Method: Start FM Radio→ Press 【CLR】 button → Press 【1ABC CALL】 button→ Press 【CLR】 to confirm after finishing scanning. Repeat these steps to scan next FM Radio channel frequency.

FM Radio Channel Storage

In FM Radio full frequency mode, input FM Radio frequency or scan the FM Radio frequency that you want to store→ Press 【CLR】 button→Press 【ENT】 button 2 seconds to enter FM Radio storage function, → Press 【 + 】 / 【 – 】 buttons to choose the FM Radio channel number that you want to store, →Press 【ENT】 button 2 seconds, when hear prompt voice, then finish the Radio channel storage.

Delete Stored FM Radio Channels (Please refer to < Delete stored channels >)

Transceiver Channel Storage

In full frequency mode, input the channel frequency and CTCSS/DCS codes that you want to store → Press 【CLR】 button→Press 【ENT】 button 2 seconds to enter store function,→ Press 【 + 】 / 【 – 】 buttons to choose the channel number that you want to store,→Press 【ENT】 button 2 seconds, when hear prompt voice, channel store is finished.

Delete Stored Channels

In channel mode, select required channel→ rotate power knob→ press 【CLR】 button to power on transceiver, the screen will display DEL? → press 【CLR】 button to confirm delete.

Note: If you want to delete the stored FM Radio channels,then you need to do this operation in FM Radio channel mode.

MENU OPERATION INTRODUCTION

Press [CLR] button + the corresponding menu value, the sequence of operations are:
In Standby Mode

Menu No.	Menu Name	Enter Menu Setting	Screen Display	Press [+]/[-] To Select Parameter(Notes)	Confirm	Return State
1	Scanning	CLR + 1ABC CALL	R BAT VULOS TOM------ PT ▶ SCAN 01 [battery] H S TDR	CLR → Start scan function, repeat this step to close scan	CLR →	ENT
2	VOX Switch	CLR + 2DEF LT	R BAT VULOS TOM------ PT ▶ VOX OFF 02 [battery] H S TDR	CLR → 1–5 levels select,screen will display "VOX" after opening VOX function. The higher the level, the lower the VOX volume; OFF is to close VOX function.	CLR →	ENT
3	VOX Delay Time(s)	CLR + 3GHI MODE	R BAT VULOS TOM------ PT ▶ VOT 1.0S 03 [battery] H S TDR	CLR → The aim of VOT is to send the messages completely including the sound tail. There are 0.5s/1.0s/1.5s/2.0s/3.0s total 5 types to select.	CLR →	ENT
4	Output power	CLR + 4JKL	R BAT VULOS TOM------ PT ▶ POWER HIGH 04 [battery] H S TDR	CLR → HIGH is high power, LCD will also display "H" icon. Select LOW is low power, LCD will also display "L" icon. Low power can enlarge battery working time, but will reduce talk range greatly.	CLR →	ENT
5	Squelch Level	CLR + 5MNO ZERO	R BAT VULOS TOM------ PT ▶ SQL 4 05 [battery] H S TDR	CLR → 0-9 levels to select. To assure receiving completely, select squelch at a low level under weak signal. But the lower the level, the stronger the received invalid interference.	CLR →	ENT
6	Dual Standby	CLR + 6PQR	R BAT VULOS TOM------ PT ▶ D.WAIT ON 06 [battery] H S TDR	CLR → This transceiver has dual standby function. ON means start this function, LCD will also display " TDR " icon, OFFmean close this function.	CLR →	ENT
7	Background Light	CLR + 7STU OPT	R BAT VULOS TOM------ PT ▶ LED AUTO 07 [battery] H S TDR	CLR → AUTO means background light will be automatic close when Transceiver does not working for 5s; ON means Background Light is on all the time; OFF is close the Background Light.	CLR →	ENT

In Standby Mode

Menu No.	Menu Name	Enter Menu Setting	Screen Display	Press [+]/[-] To Select Parameter(Notes)	Confirm	Return State
8	Prompt Voice Switch	CLR + 8	BEEP 08 / ON	ON means open prompt voice, OFF means close it.	CLR	ENT
9	Prompt Voice Indicator	CLR + 9	VOICE 09 / CHINESE	This transceiver has Chinese and English 2 prompt voices; CHINESE means Chinese, ENGLISH means English; OFF means close prompt voice function.	CLR	ENT
10	Automatic Number Identification	CLR + 1 0	ANI 10 / OFF	ON means ANI function is on, OFF means close ANI function.	CLR	ENT
11	Battery Save Mode	CLR + 1 1	RX.SAV 11 / ON	ON means battery save mode is on, LCD also displays "S" icon, OFF means battery save model is off.	CLR	ENT
12	Bandwidth Setting	CLR + 1 2	N/W 12 / WIDE	WIDE means wide band, LCD also displays "W" icon, NARROW means narrow band, LCD also displays "N" icon.	CLR	ENT
13	TX Ends Prompt Voice Switch	CLR + 1 3	ROGER 13 / OFF	ON means this function is on. OFF means this function is close.	CLR	ENT
14	Auto Key Lock	CLR + 1 4	AUTOLK 14 / OFF	ON means keypads will be locked automatically if without any operation for 5s, LCD will also display "KEY" icon; OFF means close auto keypad lock function.	CLR	ENT
15	Moving Coil Microphone	CLR + 1 5	MIC.MD 15 / OFF	ON means start moving–coil microphone, OFF means close moving–coil microphone.	CLR	ENT
16	Busy Channel Lockout	CLR + 1 6	BCLO 16 / OFF	ON means start BCLO function, LCD also displays "BUSY" icon, transmitting is forbidden while current channel is busy; When press PTT button, the transceiver will sound BCLO prompt voice; OFF means transmitting are allowed no matter current channel is busy or free.	CLR	ENT

In Standby Mode

Menu No.	Menu Name	Enter Menu Setting	Screen Display	Press [+]/[-] To Select Parameter(Notes)	Confirm	Return State
17	Offset Direction Setting	CLR + 1ABC CALL / 7STU QPT	S-D OFF 17	"+" means transmitting frequency is higher than receiving frequency. LCD will also displays "+" icon. "−" means transmitting frequency is lower than receiving frequency. LCD will also displays "−" icon. OFF means close this function.	CLR → ENT
18	Offset Frequency Setting	CLR + 1ABC CALL / 8VWX PGM	OFFSET 18 010.00000	Use keypad to input the offset frequency	CLR → ENT
19	Step Frequency Select	CLR + 1ABC CALL / 9YZ_	STEP 19 5.00K	This transceiver step frequency can select 5K/6.25K/10K/12.5K/25K/50KHz. The input frequency range is related to channel step frequency, if the input frequency range is not match the channel step frequency, then the input frequency range is invalid.	CLR → ENT
20	Open Setting	CLR + 2DEF LT / 0	OPNSET 20 LOGO	"LOGO" means icon display, "DC" means battery voltage displays when transceiver is power on, "MSG" means message displays when power on. ("MSG" function please refer to "Power On Message Set")	CLR → ENT
21	PTT- ID Set (Push-To-Talk)	CLR + 2DEF LT / 1ABC CALL	PTT-ID 21 OFF	OFF means close PTT-ID code, EOT means send PTT-ID code when press transmit button. SOT means transmit PTT-ID code when release transmit button. BOTH means the transceiver will transmit PTT-ID code whatever press or release transmit button.	CLR → ENT
22	Power-ON Message Edit	CLR + 2DEF LT / 2DEF LT	PONMSG 22 -------	Press [<] / [>] to select character position, [+] / [−] to select character.	CLR → ENT
23	Time-Out-Timer	CLR + 2DEF LT / 3GHI MODE	TOT 23 30	When beyond the setting time, transceiver will limit transmitting and send out beep tone. Time out timer can select 30S~270S, OFF means close time out timer function.	CLR → ENT
24	Scan Mode	CLR + 2DEF LT / 4JKL	SCANS 24 CO	TO means that scanning by time mode, it will continue scanning after searching for 5 seconds; CO means that scanning by carrier mode, will continue scanning after the signal disappears; SE means that stop scanning after searching signal.	CLR → ENT

In Standby Mode

Menu No.	Menu Name	Enter Menu Setting	Screen Display	Press [+]/[-] To Select Parameter(Notes)	Confirm	Return State
25	Monitoring Transceiver Set	☞ CLR + 2ᴰᴱᶠ 5ᴹᴺᴼ⁄ᶻᴱᴿᴼ	R·BAT▐▐▐▐VULOS TOM------PT ▸ DW ON 25 ⊠ H S TDR	ON indicates that listening to FM radio While receiving signals, OFF indicates that listening to FM radio while stop receiving signal.	CLR	ENT
26	CTCSS / DCS Set	☞ CLR + 2ᴰᴱᶠ⁄ᴸᵀ 6ᴾᴼᴿ	R·BAT▐▐▐▐VULOS TOM------PT ▸ C-CDC 26 ⊠ OFF H S TDR	Press 【◀】 key to select CTCSS / DCS, press 【▶】 to select DCS positive and negative code. Rotate channels knob to select the required CTCSS / DCS code. OFF to close this function	CLR	ENT
27	Receiving CTCSS / DCS Code Set	☞ CLR + 2ᴰᴱᶠ⁄ᴸᵀ 7ˢᵀᵁ⁄ᴼᴾᵀ	R·BAT▐▐▐▐VULOS TOM------PT ▸ R-CDC 27 ⊠ OFF H S TDR	Press 【◀】 key to select CTCSS / DCS, press 【▶】 to select DCS positive and negative code. Rotate channels knob to select the required CTCSS / DCS code. OFF to close this function	CLR	ENT
28	Transmitting CTCSS / DCS Code Set	☞ CLR + 2ᴰᴱᶠ⁄ᴸᵀ 8ᵂˣ⁄ᴾᴳᴹ	R·BAT▐▐▐▐VULOS TOM------PT ▸ T-CDC 28 ⊠ OFF H S TDR	Press 【◀】 key to select CTCSS / DCS, press 【▶】 to select DCS positive and negative code. Rotate channels knob to select the required CTCSS/DCS code. OFF to close this function	CLR	ENT
29	Channel Name Display Edit	☞ CLR + 2ᴰᴱᶠ⁄ᴸᵀ 9ᵞᶻ	R·BAT▐▐▐▐VULOS TOM------PT ▸ NAME 29 ⊠ OFF H S TDR	ON to start channel name display, OFF indicates to close channel Name display	CLR	ENT
30	Channel Name Edit	☞ CLR + 3ᴳᴴᴵ⁄ᴹᴼᴰᴱ 0↺	R·BAT▐▐▐▐VULOS TOM------PT ▸ CHNAME 30 ⊠ ------ H S TDR	Press [*]/[#] key to select character position, press [+] or [−] key to select character. Channel Name Edit only valid in channel mode.	CLR	ENT
31	Repeater Mode Set	☞ CLR + 3ᴳᴴᴵ⁄ᴹᴼᴰᴱ 1ᴬᴮᶜ⁄ᶜᴬᴸᴸ	R·BAT▐▐▐▐VULOS TOM------PT ▸ RELAY 31 ⊠ OFF H S TDR	ON is in repeater mode, indicate showing "U/V", OFF is exit repeater mode.	CLR	ENT
32	Repeater Transmitting Delay Set	☞ CLR + 3ᴳᴴᴵ⁄ᴹᴼᴰᴱ 2ᴰᴱᶠ⁄ᴸᵀ	R·BAT▐▐▐▐VULOS TOM------PT ▸ RPT-RL 32 ⊠ 1.0S H S TDR	0.5S ~ 4.5S optional	CLR	ENT

In Standby Mode

Menu No.	Menu Name	Enter Menu Setting	Screen Display	Press [+]/[-] To Select Parameter(Notes)	Confirm	Return State
33	Repeater Speaker Switch	CLR + 3 MODE 3 MODE	RPT-SPK 33 OFF	ON is means that indicates start repeater, radio speaker also start monitoring function. OFF indicates close speaker monitoring function	CLR	ENT
34	Repeater PTT Mode Set	CLR + 3 MODE 4 JKL	RPT-PTT 34 OFF	ON is means that PTT transmitting is available while under repeater mode. OFF indicates close this function	CLR	ENT
35	GPS Function Set	CLR + 3 MODE 5 ZERO	GPSNET 35 ON	ON means GPS function is open, OFF means close this function.	CLR	ENT
36	DTMF Side Signalling Switch	CLR + 3 MODE 6 POR	DST 36 ON	When select ON, DTMF tone can be monitored, OFF Indicates DTMF tone is not being monitored.	CLR	ENT
37	Priority Transmitting Channels Set	CLR + 3 MODE 7 OPT	TX.SEL 37 EDIT	EDIT indicates priority transmit at main frequency channel, BUSY indicates priority transmit at current frequency channel which is receiving.	CLR	ENT
38	Sound Tail Elimination Set	CLR + 3 MODE 8 PGM	STE 38 ON	Find Tail Eliminator Type, select ON to open this function, select OFF to close tail tone.	CLR	ENT

How To Use Repeater

This transceiver has own repeater function without working with other repeaters. the methods are as follows,

Press 【CLR】 Key + 【3 GHI MODE】 Key + 【1 ABC CALL】 Key→Press 【CLR】 Key→【 + 】 or 【 – 】 Key to select ON to open the repeater function. →Set the frequency of repeater. →Press 【CLR】 Key to confirm→Press 【ENT】 key to exit after setting.

All Call, Group Call, Select Call and Caller ID

This transceiver has DTMF decode and encode function, All Call, Group Call, Single Call and Caller ID are available without other communicate devices.

For Example:

There is a group with 15 people in 3 teams, each team code is * and each group member ID are as below,

5 people in Team 1, each ID :

A	B	C	D	E
↓	↓	↓	↓	↓
121	122	123	124	125

5 people in Team 2, each ID :

F	G	H	I	J
↓	↓	↓	↓	↓
131	132	133	134	135

5 people in Team 3, each ID:

K	L	M	N	O
↓	↓	↓	↓	↓
141	142	143	144	145

If want to single call A member in team 1, then transmit 121 code. Only member A can hear this call, others can not hear. If transmit 12* code, then all members in team1 can hear this call, but team 2 and team 3 can not hear. If transmit 1**, then all 3 teams members can hear the call

Caller ID

If transmitting code while transmitting caller ID, then main transceiver's call ID will be displayed on receiver's transceiver. (Example) If A member in team 1 call B member, member A transmits 122*121, then member B transceiver will display member A's ID 121, this is Caller ID.

Remote Stun / Remote Stun Wakeup

Transmit remote stun code(such as 1212), transmit 1212 code then that transceiver can be only receiving (That is, remote control others). To wakeup that transceiver, only need to transmit remote stun code 1212+# code.

Remote Kill / Remote Kill Wakeup

Transmit remote kill code(such as 1234), transmit 1234 code then that transceiver can not transmitting and receiving. LCD display will indicate "All Lock" . To wakeup that transceiver, only need to transmit remote kill code 1234+#code.

Transmit DTMF Code Manually

This transceiver can transmit DTMF code manually, when this transceiver is transmitting, input 0–9ABCD*# on the keypad, then the corresponding codes will be transmitted. Keyboard correspond DTMF code list as follows,

keyboard					DTMF code			
1	2	3	CLR	→	1	2	3	A
4	5	6	ENT		4	5	6	B
7	8	9	+ PRE −		7	8	9	C
0	<	>			0	*	#	D

Transmit Stored DTMF Code

Press "DTMF / MONI" button to enter DTMF code groups, press【+】/【−】 to select DTMF code groups, press PTT to transmit.