

# User's Manual

## Preparation

### Charging

- Well connect the adaptor cable and desktop charger, connect adaptor to AC power, the charger yellow light on.

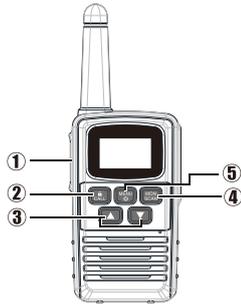


- Insert the radio with battery into battery groove, charger red light on, starting charging; Green light on when full charge.



## Getting Acquainted

### External View



### ① [PTT] Key

- Press and hold [PTT] to transmit; Release to receive.
- In menu mode, press [PTT] to return to standby mode and keep the setting.

### ② [CALL] Key

- Short press: transmit call tone;
- Long press: key lock ON or OFF.

### ③ [▲][▼] Key

- In standby mode, press [▲][▼] to adjust the volume level;
- Press and hold [▼],[PTT] then press [MENU] to switch between high and low power.
- In menu mode,press [▲][▼] to select menu item or setting value.

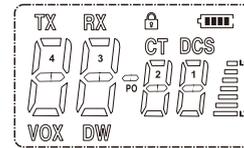
### ④ [MON\SCAN] Key

- Long press [MON\SCAN] to monitor; Release to return.
- Short press [MON\SCAN] to make scan ON or OFF.

### ⑤ [MENU] Key

- In standby mode, short press [MENU] to enter menu mode.
- In menu mode, press [MENU] to enter menu selection mode or confirm the setting.
- Long press to power ON or OFF.

### LCD Display



CT	Appears when using CTCSS.
DCS	Appears when using DCS.
[Signal Strength Icon]	Indicate signal strength.
00-00	Display channel number, menu item and value etc.
VOX	Appears when VOX ON.
DW	Appears when dual watch ON.
[Battery Icon]	Indicate battery power.
[Lock Icon]	Appears when keylock.
TX	Appears when transmit.
RX	Appears when receive.

## Menu Operation

### Menu Mode

- Short press [MENU] to enter menu mode;
- Press [▲][▼] to select menu item , press [MENU] again , the menu item flashes;
- Press [▲][▼] to select the desired menu item value;
- Press [MENU] again to keep the setting;
- Press [PTT] to return to the standby mode.

### Menu Items:

No.	Display	Functions	Options	Default
1	CH.	Channel selection	01 ~ 99 [Channel]	01(Channel)
2	Cd.	CTCSS	OF01 ~ 38	OF
		DCS	OF01 ~ 83	
3	CL.	Call tone	OFt1-t5	OF
4	Sq.	Squelch level	00 ~ 09	05
5	bL.	LCD light	OFOn/AU	AU
6	bP.	Keypad beep	OFOn	On
7	Rg.	Roger beep	OFOn	OF
8	VO.	VOX level	OF1 ~ 5	5
9	tO.	TOT	OF01 ~ 04 [mins]	OF
10	dC.	Dual watch	OF01 ~ 99 [Channel]	OF
11	CA.	Call	OFOn	On

### Channel Selection

- In menu mode,
- Press[MENU] , the current channel number flashes;
  - Press [▲][▼] to select the desired channel.

### CTCSS\DCS

- In menu mode,
- Press [▲][▼] to select the menu item "Cd.", then press [MENU], the menu item value flashes;
  - Press [▲][▼] to select the desired CTCSS/DCS code from OF01-38/01-83.

### Call Tone

- In menu mode,
- Press [▲][▼] to select the menu item "CL.", then press [MENU], the menu item value flashes;

- Press [▲][▼] to select the desired call tone from OFt1—t5.

### Squelch Level

In menu mode,.

- Press [▲][▼] to select the menu item "Sq.", then press [MENU], the menu item value flashes;
- Press [▲][▼] to select the desired squelch level from 0~9.

### LCD Backlight

In menu mode,

- Press [▲][▼] to select the menu item "bL.", then press [MENU], the menu item value flashes;
- Press [▲][▼] to select the LCD backlight OF, On or AU.  
\* OF: never lights.  
\* On: lights continuously.  
\* AU: lights for 6 seconds when any keys except [PTT] is pressed.

### Keypad Beep

In menu mode,

- Press [▲][▼] to select the menu item "bP.", then press [MENU], the menu item value flashes;
- Press [▲][▼] to select the keypad beep On or OF.

### Roger Beep

It is TX end beep.

In menu mode,

- Press [▲][▼] to select the menu item "Rg.", then press [MENU], the menu item value flashes;
- Press [▲][▼] to select the roger beep On or OF.

### VOX

When VOX function is activated, user can transmit by voice without press and hold [PTT].

In menu mode,

- Press [▲][▼] to select the menu item "VO.", then press [MENU], the menu item value flashes;
- Press [▲][▼] to select the VOX level from OF01~05.

### TOT

In menu mode,

- Press [▲][▼] to select the menu item "tO.", then press [MENU], the menu item value flashes;
- Press [▲][▼] to select the TOT OF01~04[mins] .

◆ Dual Watch

In menu mode,

1. Press [▲][▼] to select the menu item "dC.", then press [MENU], the menu item value flashes;
2. Press [▲][▼] the select the dual watch mode from OF01-99.  
\* 01~99: dual watch ON, the radio will dual watch between the current channel and selected channel.

◆ Call

In menu mode,

1. Press [▲][▼] to select the menu item "CA.", then press [MENU], the menu item value flashes;
2. Press [▲][▼] to select the call On\OF .

◆ Volume Level

In standby mode, press [▲][▼] to select the volume level from 00-15.

■ Specifications

Frequency	476.425-477.4125MHz	Li-ion battery	DC 3.7V
Channel capacity	80	Working temperature	- 20°C ~ + 55°C
Channel spacing	12.5kHz	RX sensitivity	≤ -121dBm
Frequency stability	±2.5ppm	Max. audio power	350mW
Dimensions(H*W*D)	85mm * 45mm * 24mm	RF Power	2W
Weight (with battery)	105g	Max. frequency deviation	2.5 KHz

CTCSS Tone Frequency (Hz) (38 Groups)

CODE	Frequency (Hz)						
OFF	OFF	10	94.8	20	131.8	30	186.2
1	67.0	11	97.4	21	136.5	31	192.8
2	71.9	12	100.0	22	141.3	32	203.5
3	74.4	13	103.5	23	146.2	33	210.7
4	77.0	14	107.2	24	151.4	34	218.1
5	79.7	15	110.9	25	156.7	35	225.7
6	82.5	16	114.8	26	162.2	36	233.6
7	85.4	17	118.8	27	167.9	37	241.8
8	88.5	18	123.0	28	173.8	38	250.3
9	91.5	19	127.3	29	179.9		

DCS Codes

Code No.	DCS Code (Octal)	Code No.	DCS Code (Octal)						
1	023	22	131	43	251	64	371	85	532
2	025	23	132	44	252	65	411	86	546
3	026	24	134	45	255	66	412	87	565
4	031	25	143	46	261	67	413	88	606
5	032	26	145	47	263	68	423	89	612
6	036	27	152	48	265	69	431	90	624
7	043	28	155	49	266	70	432	91	627
8	047	29	156	50	271	71	445	92	601
9	051	30	162	51	274	72	446	93	632
10	053	31	165	52	306	73	452	94	654
11	054	32	172	53	311	74	454	95	662
12	065	33	174	54	315	75	455	96	664
13	071	34	205	55	325	76	462	97	703
14	072	35	212	56	331	77	464	98	712
15	073	36	223	57	332	78	465	99	723
16	074	37	225	58	343	79	466	100 (do0)	731
17	114	38	226	59	346	80	503	101 (do1)	732
18	115	39	243	60	351	81	506	102 (do2)	734
19	116	40	244	61	356	82	516	103 (do3)	743
20	122	41	245	62	364	83	523	104 (do4)	754
21	125	42	246	63	365	84	526		