Kydera®

DUAL BAND TWO-WAY RADIO

CH-001:
155.00000
CH-002:
455.25000
MENU   A/B

FM TRANSCEIVER HT-600UV

User Manual

Getting Started :

Before you use this user manual, please review the following information carefully.

◆ How to use this user manual

◆ What information that your dealer / System Administrator can inform you

▧ How to use this user manual

This manual introduces the basic operation of Kydera Analog handheld transceiver.

However, your dealer or system administrator may already preset features of this radio based on your working type and requirement. Please consult with your dealer or system administrator about the details.

For your convenience, the following buttons can be set as shortcut operation.

[A/B] key:

◆ In standby mode, short press this button to switch between A and B band.

◆ Before entering into Menu setting, press this button to return to previous operation.

◆ In VFO mode, long press and hold this button for more than 3s to turn off one of the bands. Or short press it to switch between A and B band.

[MR/EDIT] key:

◆ In any menu setting, press this button one time to exit

operation quickly and back to home screen.

◆ In VFO mode, long press this button to enter into Channel Storage Mode.

◆ In Channel / Channel Name Display mode, long press this button to enter into Channel Name Edit Mode.

[MENU] key:

◆ In standby mode, press this button one time to Main Menu.

◆ In Menu Setting / Storage, press this button one time to confirm.

【▲/▼】 button:

◆ Used for menu selection or adjusting.

[PF1] key

Definable key (Depend the defined feature)

▧ You can check with your dealer or system administrator for the following:

◆ Is your radio with default settings or any preset channels that the distributor usually set ?

◆ Which buttons are have been designed to operate other features ?

◆ What optional accessories can be used with your radio ?

Content (I)

Preparation for operating the radio

Please assemble your radio by following steps:

Preparation for operating the radio

Charging the battery pack

Please use charger, adaptor and battery pack supplied only by us. The charger can indicate the charging status.

Charging diagram

Charging steps:
1. Plug the AC adaptor into an AC outlet, like arrow (1)
2. Plug the AC adapter cable into the adapter jack located on the back of the charger, like arrow(2)
3. Place the battery pack or the radio with a battery pack into the charger, like arrow (3)
4. The indicator lights up solid red and charging starts. When charging is completed, the indicator lights up solid green. Then remove the battery pack or the radio from the charger.
Note: For optimum battery life and performance, charge the battery pack or the radio (with a battery pack) at least 12 hours before initial use.

Charging indicators

LED indicator	Current state	Description
Flashes red and then OFF	Electrify but on standby	No-load
Lights Red	Charging	Insert battery
Lights Green	Fully charged	Charging completed
Flashes Red	Failure	For maintenances

Note:
1. It is normal if the charger LED flashes red for a short time when the charger is just connected.
2. If a second battery is replaced to charge, please wait until the current battery is fully charged (lights green).If the charger indicator flashes red during charging:
(1) Please check if the battery pack is well connected with the charger.
(2) The battery pack is damaged or failed
(3) The surrounding temperature is too high or too low.
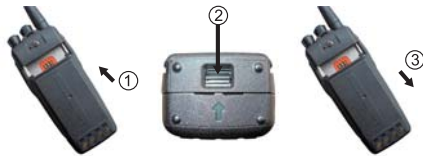⚠ **Note:** Please read the "Battery Safety Information" before useing the charger.

Installing the battery pack
1. Align the battery pack to the battery slot like diagram 1
2. Sliding the battery pack to the battery slot till the battery lock to the right place like diagram 2

Preparation for operating the radio

To remove the battery, turn off the radio firstly. Then slide the battery latch upwards to unlock the battery, like diagram 3.

Install the general interface cover (dust cover)

1. Remove two screws (as per diagram 1), then open the jack stopper.
2. Plug the accessory into according jack of the radio as per diagram 2, and then press it lightly for well contact.
3. To remove the accessory by plugging it out as per diagram 3 direction.

Reminder: If the installation can't be use, please check if the accessory is appropriate or installed incorrect.

Installing the antenna

Turn off the radio, holding the base of antenna, and then screw it into the connector on the top of transceiver and turn clockwise until secure.

To remove the antenna, turn off the radio firstly, and rotate it anticlockwise.

Installing the belt clip

Align the belt clip to the two screw holes on the back of the radio, and then tighten the screws by using special screw driver.

To remove the belt clip, unscrew the screws.

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Preparation for operating the radio

Turning the radio ON

Turn the ON / OFF/ Volume Control Knob clockwise until a click sound is heard. Then you hear a confirmation sound and a welcome image is shown on the radio display.

Note: There is no sound if the radio prompt tones or alert tone is disabled. is If the radio is not power on, please check the battery firstly to make sure it is installed properly. If the radio is still not power on, please contact your dealer.

To turn off the radio, rotate anticlockwise the volume control, till a click sound is heard. The display will show power OFF message or a prompt tone will be heard.

Adjusting the volume

Rotate clockwise the volume control to increase the volume after power on. The Volume Increasing Progress Bar will appear on the display simultaneously.

Rotate anticlockwise the volume control to decrease the volume. The Volume Increasing Progress Bar will appear on the display simultaneously.

Content (**II**)

Knowing more about the radio controls setting

Please review the following sub-directory firstly:

Knowing more about the radio controls setting

■ **Radio Controls**

Parts description:

NO.	Part Name	NO.	Part Name	NO.	Part Name
1	FP1 (Side key 1)	8	Programmable key (P1)	15	Back key / AB swich
2	PTT key(Transmit key)	9	Numeric Keypad	16	MR / EXIT key
3	FP2 (Side key 2)	10	LED Indicator	17	Speaker
4	Antenna	11	Channel selector	18	Down key
5	LCD display	12	Power switch/ volume control	19	Battery latch
6	MIC	13	Up key	20	Battery pack
7	OK / Menu key	14	SP/MIC connector	21	Belt Clip

Note: Buttons like [FP1 / FP2 / P1] are programmable keys.

Knowing more about the radio controls setting

■ **Programmable keys**

You dealers can pre-set the programmable keys based on the length of a button press.
Pre-setting can be shortcuts of radio functions.
◆ Short press -- Pressing and Releasing quickly (programmable range is from 50ms-750ms)
◆ Long press --- Pressing and holding for programmed length(programmable range is from 500ms-5000ms)
Note: The programmable duration for a key press can be used for utility functions or setting.

☐ **Radios functions can be preset by programmable keys**

1. High/Low power selection --- Switch transmit power level between high and low.
2. Backlight on /off --- Turn display backlight On or Off.
3. Keypad lock -- Switch keypad between locked and unlocked
4. Voice Operating Transmission (VOX) on /off --- Switch between VOX feature ON and Off
5. Scan on/off --- Turn on /off scanning feature
6. Scan mode selection --- Switch in CO, TO and SE.
7. Monitor --- Turn on / off radio squelch to receive weak analog signals in the air.

8. Permanent Monitor --- Always monitor the selected channels' communication till this function being disabled .

☐ **Access to features preset**

You can access to the different radio features through one of the following ways:
● Short pressing or long pressing related preset keys.
OR
● Using the following menu button [MENU]:
1. For accessing to Menu list, press [MENU] key, then press [UP] or [DOWN] key to access the menu features.
● Press [MENU] key to select the needed feature or enter into the needed submenu.
● Press [A/B] key to return to previous menu, or press [MR/EDIT] key to exit and back to home screen.
Note:
● If the radio is inactivity after a period of time, the radio will not automatically exit the menu and will stay in operation screen.

■ **Use the key board**

With the keyboard, you can input the frequency you want in VFO mode; or input the desired channel No. in Channel /Channel Name Display mode with the keyboard; as well as program

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channel name, but many characters require pressing one button several times to get. The following form shows the pressing times to get a certain character by pressing one button.

Pressing times

Secret Key	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1*	.	,	'	?	!	–	(	)	@	/	:	_	;	+	&	%	*	=	<	>	$	[	]	{	}	~	^	`	#	¡
2	A	B	C																											
3	D	E	F																											
4	G	H	I																											
5	J	K	L																											
6	M	N	O																											
7	P	Q	R	S																										
8	T	U	V																											
9	W	X	Y	Z																										
0	Note: in Number editing mode, short press this button to enter number "0", while in Number, English and editing mode, long press this button to enter "+" symbol.																													
	Note: In Number, English editing mode, short press this button to enter space.																													
	Note: In Number, English and editing mode, short press this button to switch between Number and English editing mode ("AB"Capital letters, "ab"Lowercase letters, "12" Numbers)																													

■ PTT button

There are two basic functions of [PTT] button: Transmitting and Receiving.

◆ Press [PTT] button to transmit the signals to other radios
◆ Release [PTT] button to receive signals from other radios
◆ If the TX Start / End Prompt Tones is activated, the PTT Sidetone will be heard when you press or release PTT button.
Note: You can use programming software to turn off all radio alert tones and prompt tones or just disabled partial radio alert tones and prompt tone.

■ Radio status indicators

The below icons appearing on LCD display are used for indicating transmitting and receiving.
● Transmitting Icon: Red arrow ⟹
  ◆ Indicates that the radio is in transmitting mode.
  ◆ A or B band indicates that the radio is in transmitting mode.
  ◆ Indicates the power level of the transmitting signal.
● Receiving Icon: Blue arrow ⟹
  ◆ Indicates that the radio is in receiving mode.

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◆ A or B band indicates that the radio is in receiving mode.

◆ Indicates the strength of the receiving signal.

■ Icons on LCD display

The liquid crystal display (LCD) of the radio shows radio status, character input and Menu items.

The following icons are appears on LCD display.

◆ Receiving signals (RSSI)

 Indicates no signal is received

 The Number of signal strength bars indicates the signal strength of your radio. Five bars indicate the strongest signal. This icon is only appeared in receiving.

◆ Monitor

 Indicates it is monitoring the selected channel

◆ Power level

"L" means the radio is set at low power

"H" means the radio is set at high power

◆ Ringing tones are disabled.

 Tones are turned off.

◆ VOX

 Appears when VOX is activated.

◆ Scan

 Indicates Scanning is started

◆ Priority scan

"P" in scanning list, channels with "P" are set as priority scan channels

◆ Battery pack

 The number of bars indicates the remaining battery level.

◆ CTCSS

"QT" means CTCSS is activated

∗ In standby mode, "QT" appearing means CTCSS is available in receiving.

∗ In transmitting, "QT" appearing means CTCSS is available in transmitting

∗ CDCSS

"DQT" means DCS is activated

∗ In standby mode, "DQT" appearing means DCS is available in receiving.

∗ In transmitting, "DQT" appearing means DCS is available in transmitting

■ LED Indicator

The LED Indicator indicates the working status of the radio.

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Knowing more about the radio controls setting

● Lighting Red --- radio is transmitting.
● Light Green --- radio is receiving.
● Flashing red light --- the battery is in low power.

■ Selecting a channel or frequency

You can select your desired channel or frequency thru channel selector.

Prompts:

◆ In VFO mode, the frequency you choose from channel selector is depending on the set channel spacing.

◆ In VFO mode, you can input the frequency thru digit keypad.

◆ In Channel / Channel Name Display mode, you can input channel No. thru digit keypad.

■ Setting A or B Frequency

Procedure:

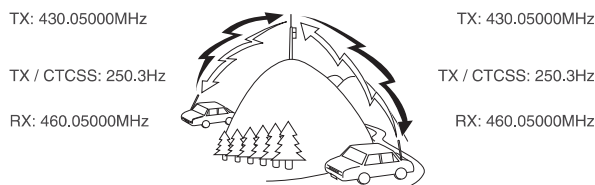◆ In standby mode:

1. The radio set in VFO mode;

2. Rotate the channel selector to choose the frequency or input frequency directly thru numeric keypad.
3. Input the desired frequency thru numeric keypad.
4. If the input frequency is wrong, press [A/B] button to delete the wrong character.

Operating Through Repeater

Repeaters, which are offer installed and maintained by radio clubs or companies related to communication, are usually located on mountain tops or other elevated locations. They generally operate at higher output power and efficiency than a typical station, and get longer working range than handheld radios communication.

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TX: 430.05000MHz

TX / CTCSS: 250.3Hz

RX: 460.05000MHz

TX: 430.05000MHz

TX / CTCSS: 250.3Hz

RX: 460.05000MHz

⚙ Repeater Setting

Most repeaters use a receive and transmit frequency pair with a standard or non-standard offset (odd-split). In addition, some repeaters must receive a tone from the transceiver to be accessed. For details, consult your local repeater distributor for information.

▣ Selecting a receiving / transmitting offset

If necessary, please store following repeater offset and all selected data to one certain channel, so that you don't need to re-program these parameters every time. Refer to "Memory Channel " operation.

Procedure:

Select a receiving frequency
↓
Select a transmitting frequency

↓
Select transmitting output power (if necessary)
↓
Select receiving / transmitting tone (if necessary)

Every channel can store direct frequency, repeater or offset frequency. Direct frequency requires setting same channel for receiving and transmitting, while offset frequency requires setting two different frequencies for receiving and transmitting.

■ Storing operation

In memory channels, you can store frequencies and related data that you frequently use, so that you dont need to re-set this data every time, just recall a memory channel quickly through simple operation. A maximum 255 memory channels are available. Please confirm the following partial functions and settings need to store before storing operation.
1. Power output selection (H, L)
2. CTCSS selection (For RX or TX, or RX/TX same frequency)
3. DCS selection (For RX or TX, or RX/TX same frequency)
4. RX / TX frequency
5. Turn on / off CTCSS or DCS

Procedure:
■ The radio set in VFO or standby mode:

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1. Turn channel selector to choose desired frequency for storage.

◆ You can enter a desired frequency by numeric keypad directly.

◆ If necessary, select the desired CTCSS or DCS code thru menu.

2. Press and hold [MR/EDIT] key for 3 seconds.

◆ A memory channel number appears on display.

3. Turn channel selector to select a desired channel number and press [MENU] key to store.

OR

■ Press [CH/FREQ] to cancel storage, and return back to home page.

Notes:

■ If there is information in the selected channel number, a symbol "★" will display on the channel number.

■ If you confirm to store the channel number with the symbol "★", the previous storage will be covered and replaced.

■ **Delete a Channel**

You can follow the steps below to delete a saved channel if needed.

Procedure:

1. Turn on the radio.

2. Choose the display mode, either frequency or channel mode.

3. Select the unwanted channel with the channel knob.

4. Turn off the radio.

5. Press [A/B] key to turn on the radio.

■ The display shows "Delete CH: 002 Are you sure?"

6. Press [OK] key to delete, or [A/B] to cancel.

■ It will return to the home screen.

Note: Please note that the info can't be recovered if deleted.

■ **Edit Channel Name**

You can follow the steps to edit the name of the saved channel. You can name it with at most 20 characters. When you select a channel, the display will show the channel name. It can be a call sign, repeater, city name, ect.

Procedure:

1. Choose the display mode to frequency or channel mode.

2. Choose the channel number with the channel knob.

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3. Hold [MR/EDIT] key for 3 seconds.

■ The display will show the edit window with blinking cursor.

4. Input the channel info with the keypad. (at most 20 characters.)

■ Press [DELETE] key to delete any unwanted characters.

5. Press [OK] to save, or press [MR/EDIT] to cancel.

■ It will return to the home screen.

Note:

During the editing, you can press [#] to change the input method.
("AB"means you are able to type capital letters. "ab" means you
are able to input lowercase letters. "12" means you are able
to type numbers from 0 to 9.)

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■ **Shortcut Operation and Setting**

Procedure:

■ On standby status:

Key		Description	Setting	Selec Tion	Confirm	Cancel (return to home screen)	Further Operation (other options)	Default
Short Press	【1】	Squelch Level Adjusting	0~9					4
【CH/FREQ】 +	【2】	CTCSS / DCS Setting	● CTCSS ● CDCSS ● OFF					OFF
	【3】	Scan Type & Scan on/off	● Scan List ● VFO Scan ● Scan Off					OFF
	【4】	RX CTCSS setting	51 code; OFF					OFF
	【5】	TX CTCSS setting	51 code; OFF	【▲/▼】	【OK】	【A/B】	Rotate the volume knob	OFF
	【6】	RX & TX CTCSS selection & setting	51 code; OFF					OFF
	【7】	RX DCS setting	108 code (N) ; 108 code(I); OFF					OFF
	【8】	TR DCS setting	108 code (N) ; 108 code(I); OFF					
	【9】	RX & TX DCS selection & setting	108 code (N) ; 108 code(I); OFF					OFF
	【0】	FM radio	—	—				OFF

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■ CTCSS

OFF	88.5	123.0	165.5	196.6	250.3
62.5	91.5	127.3	167.9	199.5	254.1
67.0	94.8	131.8	171.3	203.5	
69.3	97.4	136.5	173.8	206.5	
71.9	100.0	141.3	177.3	210.7	
74.4	103.5	146.2	179.9	218.1	
77.0	107.2	151.4	183.5	225.7	
79.7	110.9	156.7	186.2	229.1	
82.5	114.8	159.8	189.9	233.6	
85.4	118.8	162.2	192.8	241.8	

■ CDCSS

OFF	053N	131N	205 N	261 N	343 N	432 N	516 N	645 N
017N	054N	132N	212 N	263 N	346 N	445 N	523 N	654 N
023N	065N	134 N	223 N	265 N	351 N	446 N	526 N	662 N
025N	071N	143 N	225 N	266 N	356 N	452 N	532 N	664 N
026N	072N	145 N	226 N	271 N	364 N	454 N	546 N	703 N
031N	073N	152 N	243 N	274 N	365 N	455 N	565 N	712 N
032N	074N	155 N	244 N	306 N	371 N	462 N	606 N	723 N
036N	114N	156 N	245 N	311 N	411 N	464 N	612 N	731 N
043N	115N	162 N	246 N	315 N	412 N	465 N	624 N	732 N
047N	116N	165 N	251 N	325 N	413 N	466 N	627 N	734 N
050N	122N	172 N	252 N	331 N	423 N	503 N	631 N	743 N
051N	125N	174 N	255 N	332 N	431 N	506 N	632 N	754 N

OFF	053 I	131 I	205 I	261 I	343 I	432 I	516 I	645 I
017 I	054 I	132 I	212 I	263 I	346 I	445 I	523 I	654 I
023 I	065 I	134 I	223 I	265 I	351 I	446 I	526 I	662 I
025 I	071 I	143 I	225 I	266 I	356 I	452 I	532 I	664 I
026 I	072 I	145 I	226 I	271 I	364 I	454 I	546 I	703 I
031 I	073 I	152 I	243 I	274 I	365 I	455 I	565 I	712 I
032 I	074 I	155 I	244 I	306 I	371 I	462 I	606 I	723 I
036 I	114 I	156 I	245 I	311 I	411 I	464 I	612 I	731 I
043 I	115 I	162 I	246 I	315 I	412 I	465 I	624 I	732 I
047 I	116 I	165 I	251 I	325 I	413 I	466 I	627 I	734 I
050 I	122 I	172 I	252 I	331 I	423 I	503 I	631 I	743 I
051 I	125 I	174 I	255 I	332 I	431 I	506 I	632 I	754 I

Content (▥)

Menu Operation and Setting

With the permission of your distributor or system administrator, you are allowed to configure or check the basic operations and function through menu.

▥ **Set**

◎ You can carry out the following functions in the setting list:

Menu Operation and Setting

Access Menu

Procedure:

1. Press [MENU] key to access Sub menu.
2. Press [▲/▼] key to select Menu, and press [OK] key.

OR

■ Press [BACK] key to return to the previous menu.

▤ Set

⚙ Parameter Set

With the permission of your distributor or system administrator, you can configure or check the functions, such as TOT, high/low power, power-save mode, ect following the procedure below.

▢ TOT

You can turn on TOT function to avoid the occupation of other's communication due to the long-time transmitting. If you turn on the TOT function, it will start to time the second you press the [PTT] key . And the transmission will stop automatically when time is up. You will have to release the [PTT] key and press again.

Procedure:

1. Press [MENU] key to access Menu.
2. Press [▲/▼] key to select setting, and press [OK] key.

3. Press [▲/▼] key to select parameter , and press [OK] key.
4. Press [▲/▼] key to select TOT, and press [OK] key.
5. Press [▲/▼] key to Time Set, and press [OK] key.

■ The display shows Call Tone(S). (setting range: 30S~500S)

■ Press [▲/▼] key to select the number.

■ Press [OK] key, display shows "Call Time is Set" and then returns to the previous menu.

OR

■ Press [▲/▼] key to On / Off, and press [OK] key.

■ Press [▲/▼] key to select On or Off, and press [OK] key.

■ The display shows "Set Ok" and then returns to the previous menu.

■ Press [BACK] key to return to the previous menu.

▢ Power (A/B Band)

You can set the output power of A or B bandto extend the battery usage.

Procedure:

Press preset [Hi/Low Power] key to switch between high and low power.

OR

Carry out the transmitting power level via menu:

1. Press [MENU] key to access Menu.
2. Press [▲/▼] key to select set, and press [OK] key.
3. Press [▲/▼] key to select parameter, and press [OK] key.

Menu Operation and Setting

4. Press [▲/▼] key to select Power, and press [OK] key.

5. Press [▲/▼] key to select High power, and press [OK] key.

OR

■ Press [▲/▼] key to " low power", and press [OK] key.

■ The display shows "Power is set" and returns to the previous menu.

6. Press [BACK] key and returns to the previous menu.

Note:

◆ High power realizes the long distance communicate with target radio.

◆ Low power realizes the short distance communication with target radio.

❑ Power Save Mode

You can set the power-save mode to extend the battery usage and working power.

Procedure:

1. Press [MENU] key to access Menu.

2. Press [▲/▼] key to select set, and press [OK] key.

3. Press [▲/▼] key to select Parameter, and press [OK] key.

4. Press [▲/▼] key to select Power Save Mode, and press [OK] key.

5. Press [▲/▼] key to select LowConsume SW, and press [▲/▼] key.

■ Press [▲/▼] key to select ON or OFF options, and press [▲/▼] key.

■ The display shows "Set Ok" and returns to the previous menu.

OR

■ To Delayed On Time, and press [OK] key.

■ The display shows Low Consume Time.

■ Press [▲/▼] key to select the starting time. (Range:10S~60S)

■ Then press [OK] key, and the display shows "Set Ok" and returns to the previous menu.

OR

■ To Sleep Time Ratio and press [OK] key.

■ The display shows the Sleep Time Ratio list.

■ The display shows "Set Ok" and returns to previous menu.

6. Press [BACK] key to return to previous menu.

Note:

■ The setting will be valid ONLY when power-save mode is turned on.

■ Please select the Sleep Time Ratio reasonably according to your actual demand. (The bigger ratio you set, the longer the battery works. But, it may cause delay in signal received.)

Prompt Tone

You can set the radio prompt tone through menu operation.

Menu Operation and Setting

❒ **Profiles**

You can set the radio profile through menu.

There are two modes you can choose for radio profiles:

▲ Standard - turn on all the prompt tone.

▲ Silence - turn off all the prompt tone.

Procedure:

1. Press [MENU] key to access Menu.

2. Press [▲/▼] key to select Set, and then press [OK] key.

3. Press [▲/▼] key to Tone, and press [OK] key.

4. Press [▲/▼] key to Profiles, and press [OK] key.

5. Press [▲/▼] key to standard, and press [OK] key.

■ The display shows "Profile is set"and returns to the previous menu. Or, press [BACK] key and return to the previous menu.

OR

■ To Silence, and press [OK] key.

■ The display shows "Profile is set" and returns to the previous menu.

6. Press [BACK] key, to return to the previous menu.

❒ **Keypad Tone**

You can turn on or off the radio keypad tone through menu.

Procedure:

1. Press [MENU] key to access Menu.

2. Press [▲/▼] key to select Set, and then press [OK] key.

3. Press [▲/▼] key to Tone, and press [OK] key.

4. Press [▲/▼] key to Keytone, and press [OK] key.

5. Press [▲/▼] key to On/Off, and press [OK] key.

6. Press [▲/▼] key to ON, and press [OK] key.

■ The display shows "Keytone is set" and returns to the previous menu.

OR

■ To OFF, and press [OK] key.

■ The display shows "Keypad tone set" and returns to the previous menu.

OR

■ To Volume, and press [OK] key.

■ Press [▲/▼] to set the keypad tone volume, and press [OK] key.

■ The display shows "Keypad is set" and returns to the previous menu.

7. Press [BACK] key to return to the previous menu.

❒ **Low Battery Alert**

If it is allowed by dealer or system administrator, users can set and check low battery alert through menu display.

You can turn on or off the low battery alert and adjust its volume.

Procedure:

Menu Operation and Setting

1. Press [Menu] Key to access the menu.

2. Press [▲/▼] key to "Set" and press [OK] key.

3. Press [▲/▼] key, select "Tone" and press[OK] key.

4. Press [▲/▼] key to select "Power Tone" and press [OK] key.

5. Press [▲/▼] key to select "ON/OFF" and press[OK] key.

6. Press [▲/▼] key to select "ON" and press[OK] key.

■ The screen shows "Tone is Set" and returns to the previous menu.

OR

■ To OFF, and press [OK] key.

■ The display shows "Tone is Set" and returns to the previous menu.

OR

■ To Volume and press [OK] key.

■ Press [▲/▼] key to select the volume, and press [OK] key.

■ The display shows "Tone is Set" and returns to the previous menu.

7. Press [Back] to return to the previous menu.

☐ Call Alert

Users can set and check the call alert through menu display.

◎ You can turn on or off the call alert in 2 different modes.

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You can set the Call Alert through menu.

There are two modes you can choose for radio profiles:

■ TX Begin Tone – when you press [PTT] key to transmit.

■ TX Ended Tone – when you release [PTT] key.

Procedure:

1. Press [Menu] Key to access Menu.

2. Press [▲/▼] key to Set, and then press [OK] key.

3. Press [▲/▼] key to Tone, and press [OK] key.

4. Press [▲/▼] key to Call Tone, and press [OK] key.

5. Press [OK] key To TX Begin Tone, and press [OK] key turn it on or off.

OR

Press [▲/▼] key to TX End Tone, and press [OK] key turn it on or off.

6. Press [BACK] key to return to the previous menu.

Note:

■ Tick "✓" to turn on the tone.

■ Untick "✓" to turn off the tone.

🖳 Others (Basic Set)

Through the radio menu, you could set some common basic functions of radio.

Menu Operation and Setting

❒ **Language**

Through the radio menu, you could set the desired language to work as screen language.

Procedure:

1. Press[MENU]key to access Menu.

2. Press [▲/▼] key to Set, then press [OK] key.

3. Press [▲/▼] key to Others, and then press [OK] key.

4. Press [▲/▼] key to Language, and then press [OK] key.

5. Press [▲/▼] key to select desired language, and then press [OK] key.

6. The display shows "Lang is set" and returns to the previous menu.

Or

Press [Back] to return to the previous menu.

❒ **Keylock**

Through the radio menu, you can set the keylock type to avoid improper input.

▲ Auto --- The keypad will be locked automatically if there is no operation more than one min.

▲ Manual --- Press [OK]key and then[*]key to lock the keypads.

Procedure:

1. Press[MENU]key to access Menu.

2. Press [▲/▼] key to Set, then press [OK] key.

3. Press [▲/▼] key to Others, and then press [OK] key.

4. Press [▲/▼] key to Keylock, and then press [OK] key.

5. Press [▲/▼] key to Auto, and then press [OK] key.

■ Press [▲/▼] key to sub-menu ON or Off, and then press[OK]key.

■ The display shows "Lock is set" and returns to the previous menu.

OR

■ Press [▲/▼] key to Manual, and then press [OK] key.

■ Press [▲/▼] key to sub-menu ON or Off, and then press [OK] key.

■ The display shows "Lock is set" and returns to the previous menu.

6. Press [Back] key to return to the previous menu.

Note:

◆ Press [OK] key and then[*]key to unlock.

❒ **Back light**

Through the radio menu, you could set the radio backlight mode and brightness to save battery consumption.

▲ ON ---The LCD light remains solid ON.

▲ Off --- The LCD light is off (Dim light)

▲ Auto --- if there is no operation more than one minute, the

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Menu Operation and Setting

backlight will be off automatically. When there is a signal received or keypad input, screen will light ON automatically.

Procedure:

Press the preset [Backlight] key to switch ON or OFF the backlight.

OR:

1. Press [MENU] key to access Menu.

2. Press [▲/▼] key To Sett, then press [OK] key.

3. Press [▲/▼] key to Others, then press [OK] key.

4. Press [▲/▼] key to Backlight, then press [OK] key.

5. Press [▲/▼] key to On/Off, then press [OK] key.

■ Press [▲/▼] key to your desired type, and then press [OK] key.

■ The display shows "Set Ok" and returns to the previous menu.

OR

■ Press [▲/▼] key to Brightness, and then press [OK] key.

■ Press [▲/▼] key to Brightness Level, and then press[OK]key.

■ The display shows "Set Ok" and returns to the previous menu.

6. Press [Back]key to return to the previous menu.

❒ Version

Though the radio menu, you could check the radio's version information.

Procedure:

1. Press [MENU] key to access Menu.

2. Press [▲/▼] key to Set, then press [OK] key.

3. Press [▲/▼] key to Others, and then press [OK] key.

4. Press [▲/▼] key to Version, and then press [OK] key.

5. The LCD shows the version information of the radio.

6. Press [Back] key to return to the previous menu.

❒ Display Mode (A/B Band)

You can set and check display mode of the radio through menu display.

▲ Channel No. & Name --- Channel number and name (preset) will be displayed on the screen.

▲ Channel No. & Freq --- Channel number and frequency will be displayed on the screen.

▲ Channel No. ---- Channel number will be displayed on the screen.

▲ VFO --- The receive and transmit frequency will be displayed on the screen.

▲ Single/dual band ---- The single band or dual band will be displayed on the screen.

Procedure:

1. Press[Menu]key to access Menu.

2. Press [▲/▼] key to Set, then press [OK] key.

3. Press [▲/▼] key to Others, then press [OK] key.

4. Press [▲/▼] key to DispMode, then press [OK] key.

Menu Operation and Setting

5. The display modes list will be displayed on the screen.

6. Press [▲/▼] key to your desired mode and then press [OK] key.

■ Press [▲/▼] key to your desired mode and then press [OK] key. (If desired).

7. The display shows "Set Ok" and returns to the previous menu.

8. Press [Back] key to return to the previous menu.

❒ Channel Switch (ENC)

You can turn ON or OFF the channel selector to prevent accidentally rotate from changing channel.

Procedure:

1. Press [Menu] key to access Menu.

2. Press [▲/▼] key to Set, then press [OK] key.

3. Press [▲/▼] key to Others, then press [OK] key.

4. Press [▲/▼] key to ENC, then press [OK] key.

5. ON or OFF will be displayed on the screen.

6. Press [▲/▼] key to your desired set and then press [OK] key.

7. The display shows "Set Ok" and returns to the previous menu.

8. Press [Back] key to return to the previous menu.

❒ VOX

If it is permitted by dealers or system administrator, you can set and check VOX feature and sensitivity level through menu display. You can turn ON VOX, so that they can initiate the call without pressing[PTT]key. If the microphone with VOX detects voice, the radio will auto transmit until the microphone fails to detect voice.

Procedure:

Press the preset [VOX] key, VOX will be switched between ON and OFF.

OR

1. Press [Menu] key to access Menu.

2. Press [▲/▼] key to Set, then press [OK] key.

3. Press [▲/▼] key to Others, then press [OK] key.

4. Press [▲/▼] key to VOX, then press [OK] key.

5. Press [▲/▼] key to VOX Switch, and press [OK] key.

■ On and OFF will be displayed on the screen.

■ Press [▲/▼] key to your desired set, then press [OK].

■ The display shows "Set Ok" and returns to the previous menu.

■ Press [Back] key to return to the previous menu.

OR:

■ Press [▲/▼] key to VOX Level, then press [OK] key;

■ Vox level from one to twelve will be displayed on the screen.

■ Press [▲/▼] key to your desired level, then press [OK] key.

■ The display shows "Level is set" and returns to the previous menu.

■ Press[Back] key to return to the previous menu.

6. Press [Back] key to return to the previous menu.

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Note:

◆ The higher level selected the higher sensitivity the voice will detect. You should program it based on the working environment.
◆ To turn on or off VOX is only effective against the radio with VOX enabled. Please contact your dealer or system administrator for more information.

🔘 Restore Factory

You are allowed to restore some factory default settings of the radio thru menu operation.

Procedure:

1. Press [Menu] key to access Menu .
2. Press [▲/▼] key to Settings, then press [OK] key.
3. Press [▲/▼] key to StorFactory, then press [OK] key.
4. "Are you sure Factory Reset" will be displayed on the screen.
5. Press [OK] key to confirm, and the screen returns to the previous menu.

OR

Press[Cancel]key to cancel the operation and returns to the previous menu.

6. Or Press[Back]key to return to the previous menu.

Note:

Please note that once you confirm to restore factory setting, all of your previous storage or settings will be unrecoverable.

🔘 Function Set

You can set some common function through menu operation.

❒ Squelch Level (A/B)

If required, you could preset the signal strength to open the speaker of the radio band A or B, to prevent the interference from useless signal. The higher SQ level it is, the stronger signal strength is required for receiving.

Procedure:

1. Press [Menu] Key to access Menu.
2. Press [▲/▼] key to Set, and then press [OK] key.
3. Press [▲/▼] key to Function, then press [OK] key.
4. Press [▲/▼] key to SQ Level, then press [OK] key.
5. Press [▲/▼] key to your desired level, then press [OK] key.
6. The display shows "Set Ok" and returns to the previous menu.
7. Or Press[Back]key to return to the previous menu.

Note:

◆ The higher SQ level is the lower receiving sensitivity will be, and the closer of the talk range will be. You can set it depending on the working environment.

❒ Frequency Step (A/B)

If required, you can preset the frequency step for radio band A or B under VFO mode.

Menu Operation and Setting

Procedure:

1. Press [Menu] Key to access Menu.

2. Press [▲/▼] key to Set, and then press [OK] key.

3. Press [▲/▼] key to Function, then press [OK] key.

4. Press [▲/▼] key to Freq Step, then press [OK] key.

5. Press [▲/▼] key to your desired step, then press [OK] key.

6. The display shows "Set Ok" and returns to the previous menu.

7. Or Press [Back] key to return to the previous menu.

❒ Busy Channel Lockout

If needed, you can preset your radio to allow it to transmit or not when it receives a signal.

Procedure:

1. Press [Menu]Key to access Menu.

2. Press [▲/▼] key to Set, and then press [OK] key.

3. Press [▲/▼] key to Function, then press [OK] key.

4. Press [▲/▼] key to BCL, then press [OK] key.

5. Press [▲/▼] key to ON or OFF, then press [OK] key.

6. The screen shows "Set Ok" and returns to the previous menu.

7. Or Press [Back] key to return to the previous menu.

Note:

◆ When you turn on the busy channel lockout, and your radio receives the carrier signal, then your radio will be forbidden to transmit.

❒ Narrow/Wide Band (A/B)

If needed, you can preset the narrow/wide band for your radio band A or B .

Procedure:

1. Press [Menu]Key to access Menu.

2. Press [▲/▼] key to Set, and then press [OK] key.

3. Press [▲/▼] key to Function, then press [OK] key.

4. Press [▲/▼] key to Band, then press [OK] key.

5. Press [▲/▼] key to Wide, then press [OK] key.

■ The screen shows "Set Ok" and backs to the previous menu.

OR:

■ To Narrow, and then press[OK]key.

■ The screen shows "Set Ok" and returns to the previous menu.

6. Press [Back] key to return to the previous menu.

⊙ Signaling

You can preset the CTCSS or CDCSS through menu operation.

❒ CTCSS / DCSS (A/B)

If needed, you can preset the tone of RX and TX for radio band A or B to prevent the interference from useless signal.

Procedure:

1. Press [Menu] Key to access Menu.

2. Press [▲/▼] key to Set, and then press [OK] key.

Menu Operation and Setting

3. Press [▲/▼] key to Signaling, then press [OK] key.

4. Press [▲/▼] key to SubAudio, then press [OK] key.

5. Press [▲/▼] key to Receive, then press [OK] key.

OR:

■ Press [▲/▼] key to Transmit and press [OK] key.

6. The screen shows the signaling list

7. Press [▲/▼] key to CTCSS and press [OK] key.

OR:

Press [▲/▼] key to DCS and press [OK] key.

OR:

Press [▲/▼] key to Signaling Carrier and press [OK] key.

8. Press [▲/▼] key to select CTCSS/DCS code and press [OK] key.

■ The screen shows "Set Ok" and returns to the previous menu.

9. Press [Back] key to return to the previous menu.

Note:

If receive or transmit frequency is preset as Signal Carrier, the radio will turn off any preset CTCSS/DCS code for receiving or transmitting.

🔲 FM radio

You can set or operate FM radio from menu operation.

Procedure:

1. Press [Menu] key to access Menu.

2. Press [▲/▼] key to FM Radio, then press [OK] key.

3. The screen displays the received FM frequency.

4. Press [▲/▼] key to seek or input FM radio frequency.

■ Press [Back] key to exit FM radio. Radio will return to the previous menu.

OR

■ Press [Ok] key

■ Press [▲/▼] key to Save Ch and press [OK] key.

■ The screen displays "FM list saved" and returns to the previous menu.

■ Press [Back] key to exit FM radio.

OR

■ Press [▲/▼] key To Sel Saved CH and press [OK] key.

■ The screen displays a list of saved FM channels.

■ To select your desired channel, then press [OK] key.

■ To Delete, and press [OK] key.

■ The screen displays "Are you sure?" for your double check.

■ Press [OK] key to confirm, the screen displays "FM CH is delete". Or press [Cancel] to cancel the operation, and back to previous menu.

OR

■ To PLAY and press [OK] key

■ The screen returns to FM radio, and plays the selected FM channel.

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OR

■ To Seek Mode and press [OK] key

■ To Manual or Auto, and press [OK]key.

■ The screen displays "Set ok" and returns to FM radio interface.

5. Press [Back]key to exit FM radio.

Notes:

◆ "Manual" means the radio will seek FM radio frequency by step frequency at 100Khz.

◆ "Auto" means the radio will seek FM frequency automatically. Once received a signal, it will stop seeking and start playing the FM frequency.

◆ In FM Radio Mode, if [PTT] key is pressed or signal comes in, FM radio will be exited temperately until PTT released or received signal disappears.

▢ Scan

You are able to set or operate the scan feature from menu operation. Once your activated the feature, your radio will start cyclical scan to check if there is signal on all preset scan channels. Once the Scan is activated, the LED will flash RED, and the icon [↻] will be displayed on the top of screen.

▢ List Check

You can preset the desired scan list members. Then you radio will cyclical scan the list channels to check if there is signal coming. The radio supports maximum 255 scan channels.

If it is permitted by your dealer or system administrator, you can add, delete and select priority channel etc from menu operation.

Procedure:

1. Press [MENU] key to access Menu.

2. Press [▲/▼] Scan, and then press [OK] key.

3. Press [▲/▼] key to List Scan, then press [OK] key.

4. The screen displays all channels under scan list.

5. Press [▲/▼] key to select desired scan channel, and then press [OK] key.

6. Press [▲/▼] key to select the sub-menu options.

7. Press [Back] key to back previous menu.

● **Priority Channel set or disable.**

Procedure:

4. Make same operation steps 1~4 as List Check.

5. Press [▲/▼] key to select desired scan channel, and then press [OK] key.

6. Press [▲/▼] key to select "Set PrioCH" and press[OK]key.

■ The screen displays "Set ok", and returns to scan channel list.

■ An icon "P" displayed at the right side of priority channel to indicate the current channel is priority channel.

OR

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■ Press [▲/▼] key to Disable PriCH, and press [OK] key.

■ The screen displays "Set ok", and returns to scan channel list.

■ The icon "P" disappeared indicates the current channel is no more priority channel.

7. Press [Back] key to return to the previous menu.

Notes:

◆ The icon "P" appeared at the right side of the channel in the scan list indicates the channel is a priority channel. You can have ONLY one priority channel in a scan list.

◆ If the priority channel is disabled, then the icon "P" will be disappeared.

● **Delete scan list channel**

If a channel keeps no activities or no signals (called "Useless" channel) during scan, you can delete it temporarily from the scan list.

Procedure:

4. Make same operation steps 1~4 as List Check.

5. Press [▲/▼] key to select desired scan channel, and then press [OK] key.

6. Press [▲/▼] key to Delete CH, then press [OK] key.

■ The screen displays "Delete", and returns to scan channel list.

7. Press [Back] key to return to the previous menu.

Note:

◆ If a channel is delete from the scan list, when you start scan, it will not be scanned, unless you add it to the scan list again.

● **Add new channel to the scan list**

Procedure:

4. Make same operation steps 1~4 as List Check.

5. Press [▲/▼] key to select a scan channel, and then press [OK] key.

6. Press [▲/▼] key to Add CH, and then press [OK] key

7. All channels beyond scan list will be displayed.

8. Press [▲/▼] key to desired CH, then press [OK] key to add.

9. The screen displays "Set Ok", and returns to the previous menu.

10. Press [Back] key to return to the previous menu.

❑ **Scan Mode**

You can select the processing modes when the radio detects signal over the air from menu display when the Scan is ON.

● There are three options at your disposal:

▲ CO (carrier) --- Once radio receives a scanned signal over the air, it will stay at that channel until the signal disappears, and then continue to scanning.

▲ TO (Time) --- Once the radio receives a scanned signal over the air, it will stay at that channel for a preset time. Once time is out, it will continue to scanning.

▲ SE (Seek) --- Once the radio receives a scanned signal over

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the air, it will stay at that channel and stop scanning until you re-activate to scan.

Procedure:

1. Press [MENU] key to access Menu.
2. Press [▲/▼] key to Scan, and press [OK] key.
3. The screen displays all channels under scan list.
4. Press [▲/▼] key to Scan mode, then press [OK] key.
5. Three scan modes displayed on screen.
6. Press [▲/▼] key to your desired scan mode, and then press [OK] key.
7. The screen displays "Set Ok", and returns to the previous menu.
8. Press [Back] key to return to the previous menu.

❒ Scan ON or OFF

Procedure:

Press the preset [Scan]key to turn ON or OFF scan.

OR:

1. Press [MENU]key to access Menu.
2. Press [▲/▼] key to Scan, and then press [OK] key.
3. Press [▲/▼] key to Scan, then press [OK] key.
4. The screen displays sub-menu under scan.
5. Press [▲/▼] key to List Scan or Freq Scan, then press [OK] key.
6. The screen displays "Start scan", and then returns to home screen.

OR

■ Press [▲/▼] key to Scan OFF, and press [OK] key.

■ The screen displays "Disable scan", and then returns to home screen

Note:

◆ Once scan is turned off, LED will be OFF, and the scan icon [↻] will disappear from the screen.

❒ A/B Dual Standby

It refers to use UHF and VHF at the same time. That is to receive both signals from UHF and VHF, and meanwhile, you could talk to UHF or VHF signal received. (Only be effective for the radio under VFO mode)

Example: When radio under UHF VFO, UHF to work as main frequency, and VHF work as sub-frequency. When you receive UHF signal, a blue arrow will point to UHF, press [PTT] button for UHF transmitting. When you receive VHF signal, screen will show VHF frequency and blue arrow beside VHF. Short press [A/B]key, then the receiving VHF will switch to band A, then press [PTT]button for VHF transmitting. If there is no operation after 3s, radio will switch to UHF band for dual standby working.

1. Short press [A/B] key to switch between UHF and VHF.
2. Long press [A/B] key to turn ON or OFF one band. That is to be single band for working.

❒ To preset scan via programming software

Your dealer or system administrator can program the talkback modes or transmitting types during scanning via programming software.

❒ **Talkback and transmitting types**
Your radio will stay on an active channel or group talk during scan, the time period when radio stays on the channel or group talk is called *Idle time*.
● You can preset the talkback and transmitting types via software.
▲ **Talkback**
1. If software presets it ON, when a carrier signal under the scan list is received during scan, and disappeared. Press [PTT] button to reply the current channel member scanned within 3s.
2. If software presets it OFF, you can set the transmitting reply mode through [Scan transmitting mode].
Notes:
◆ Options: ON/OFF
◆ Default: ON
▲ **Scan transmitting mode**
1、Start channel
■ To reply a call before scan initiated.

2、Last active channel
■ To reply a call on last previous active channel.
3、Appointed channel
■ To appoint a ONLY channel to reply call.
■ Select a appointed channel for reply, when your radio receives a carrier signal scanned under scan list during scanning, and when the signal disappears, press [PTT] button to reply the call is on that appointed channel.

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General guide for fault handling

Malfunction	Analysis of causes	Handling method
Fail to turn ON radio	Battery is possibly installed incorrectly	Re-install battery
	Battery power lower than preset value	Please change or charge battery.
	Bad battery contacts or contacts in dirty.	Check and clear the battery. contacts.
The sound get lower or unclear or interrupted during receiving signal	Battery power get lower.	Please change or charge battery.
	Volume control at low value.	Adjust the volume to be higher.
	Antenna gets loose or antenna frequency is incorrect.	Power off radio, and re-install antenna, or change antenna with right frequency.
	Speaker is blocked or damaged.	Try to clear the outer speaker or contact your dealer.
	Using the radio under poor working environment or strong electromagnetic interference	Change working environment or shift antenna direction.
Fail to talk with group members	The current working channel frequency or signaling setting is different with other group members.	Change channel or reset signaling to be same as other group members
	The setting of signaling or channel is incorrect.	Reprogram the current channel or signaling.
	Far away with that group members.	Get closer to that group members.
Pops up other communication or noise on the current channel.	To be interfered by other users on same frequency.	To change frequency or channel.
	Did not program with relevant signaling	To program signaling for the group member to prevent same frequency interference.
Louder noise during communication	The communication distance is too far between members.	Get closer to other members
	To be blocked by high building, or be on lower landform or basement etc working environment.	Go for open air area, and turn on radio again for a try.

General guide for fault handling

Malfunction	Analysis of causes	Handling method
Louder noise during communication	To be interfered strongly by external environment or others.	Try to keep away with instruments or equipments which may cause interference.

Note: If the above methods fail to solve your problem, or you confront other different malfunctions, please contact your local dealer or appointed maintenance station for more supports.

Maintenance and Clean

To ensure the radio's best performance and prolong its working life, please be acquainted with the following contents so as to make well maintenance and cleanness for the radio.

Maintenance
◎ Please do not scratch or puncture the device with hard matter.
◎ Please do not place the device under the environment which can corrode electronic circuit or under sun direct radiation.
◎ Please do not carry the device by handing its antenna or headset.
◎ Please make sure the SP-MIC be covered well if it is not in use.

Clean
Please clean your device regularly by using dry laid fabric or soft brush to wipe the dust on surface and charger contacts; The keypads, control knob and housing case of the device are easy get dirty. Please use nonwoven wipes to clean them. Please do not use chemical to clean it such as detergent, alcohol, spray or petroleum products, or the device surface or printing character maybe damaged. Before power on the radio, please make sure the device is dry completely.

FCC Warning

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This device complies with Part
15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

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Standard accessories

AC Adaptor	Charger	Li-pol Battery
Antenna	Belt Clip	Tie

Kydera®

PROFESSIONAL DUAL BAND TWO-WAY RADIO