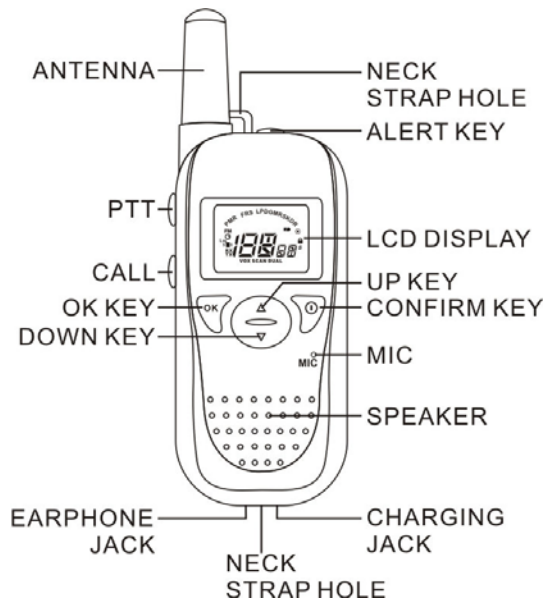




USER MANUAL FLYTALK SMART



Congratulations

You have just purchased a quality 2 Way Radio with Compact Size. Please follow the operation and care instructions in this user manual, the communicators will provide you with years of trouble-free service.

Main Screen (Fig.1)

1. Channel Number—PMR 1-8
2. Sub-code :00/01-38
3. Battery Level Indicator
 -  Full
 -  Blinks, batteries change is must
4. Auto Power Off Indicator
5. Key Lock Indicator
6. Stop Watch Function
7. Dual Watch Function Indicator
8. Channel Scan
9. VOX
10. Transmitting Mode (TX)
11. Receiving Mode (RX)
12. Normal Walkie Talkie Mode
13. Vibration Alert Mode
14. Low Power Output Mode
15. Stop Watch Function

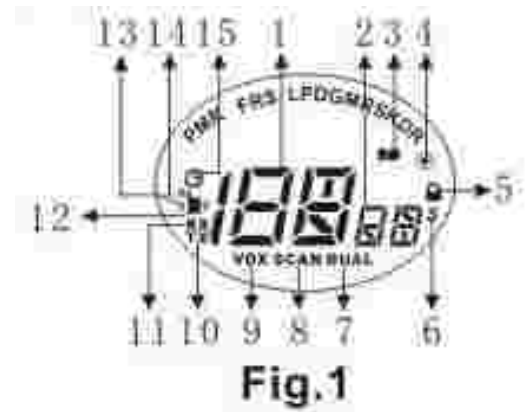


Fig.1

Remarks: Under Stop Watch Function, both icon no.6 & icon no.15 shown on the LCD screen.


Battery Installation

1. Ensure the unit is off.
2. Open the battery compartment door.
3. Install only 1 piece Li-ion battery according to the + / - signs shown in the battery compartment.
4. Close the battery compartment door.

Quick Guide

A. Start to Operate

Power On / Off

1. Press and hold  key for 3 seconds with a “Bip” sound indicates the radio is ready for use. (Fig.2)
2. Repeat the same to turn off the radio.

key Lock / Unlock Keypad

1. Press and hold **OK** key, then press **▲** key to lock the keypad.
2. Press the same again to unlock the keypad.

B. “Walkie Talkie ” Operation

Select the same channel & sub-code as that of your partner’s

1. In Fig.2 press **▲/▼** key to enter Fig. 3, “Ch” appears on LCD, then press **OK** key to confirm.
2. Press **▲/▼** key to alter the channel. In this case, CH=8. Fig.4
3. Press **OK** key to confirm the channel and return to main screen.
4. In Fig.2, press **▲/▼** key to enter Fig.5, then press **OK** key to confirm.
5. Press **▲/▼** key to alter the sub-code from 00-38. In this case, choose 38. Fig.6.
6. Press **OK** key to confirm the sub-code and return to main screen.

To Make a Call

1. Press **CALL** key once to make a calling tone, “TX” shows. (Fig.7)
2. There are short calling melodies indicate the starting and ending of transmitting call tone.

Transmitting message

Press and hold **PTT** key to talk to other user. “TX” shows to indicate message transmission.(Fig.7).

To Receive a Call

Release **PTT** key and wait for signal.(Fig.8)

“RX” indicating radio is in receiving mode

Talk Over Earphone

Simply plug the earphone into the Earphone Jack, press **PTT** key of the earphone and speak.



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11

Functions Set Up

Selecting Channel

1. In Fig.2 press ▲/▼ key to enter Fig.3, then press **OK** key to confirm.
2. Press ▲/▼ key to alter the channel. In this case, CH=8. Fig.4.
3. Press **OK** key to confirm the channel and return to main screen.

Selecting Sub-code

1. In Fig.2 press ▲/▼ key to enter Fig.5, then press **OK** key to confirm.
2. Press ▲/▼ key to alter the sub-code from 00-38. In this case, choose 38. Fig.6.
3. Press **OK** key to confirm the sub-code and return to main screen.

Remarks: If sub-code is set as 00, that means no sub-code is set. (Fig.9)

Activate / Close the Auto-scan of Channel

1. Press ▲/▼ key to enter Fig. 10, then press **OK** key to start channel scan, Fig. 11.
2. Press ▲/▼ key to change the channel scan direction.
3. Scanning process will stop for 10 seconds when it finds the same channel & sub-code where transmission is taking place. Press **OK** key to stop scanning or channel scan will start again after 10 seconds.

Squelch (SQ) Level Adjustment

Squelch Control is used for filtering the noise in a channel.

1. In Fig. 2, press ▲/▼ key to enter Fig.12, then press **OK** key to confirm.
2. Press ▲/▼ key to alter SQ level (2 levels). Fig.13
Higher SQ level will have better interference elimination ability but shorter communication range.
Lower SQ level will have lower interference elimination ability but longer communication range.
3. Press **OK** key to confirm the setting and return to main screen.

Volume Level Adjustment

1. In Fig. 2, press ▲/▼ key to enter Fig.14, then press **OK** key to confirm.
2. Press ▲/▼ key to adjust the volume level from 1 to 8. Fig.15.
3. Press **OK** key to confirm and return to main screen.

Activate / Close / the VOX & Modulate Sensitivity

VOX is the voice activating transmission function. Users can talk and communicate with each other without pressing and holding the **PTT** button.

1. Activate / Close VOX

- 1a. In Fig. 2, press ▲/▼ key to enter Fig. 16, then press **OK** key to enter Fig. 17 or Fig. 18.
- 1b. In Fig. 17, press **OK** key to activate VOX and the icon “VOX” shows as Fig. 19.
- 1c. In Fig. 18, press **OK** key to close VOX and return to main screen.



Fig. 12

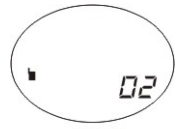


Fig. 13

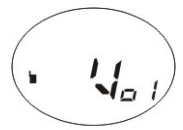


Fig. 14

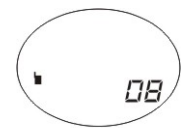


Fig. 15



Fig. 16



Fig. 17



Fig. 18



Fig. 19

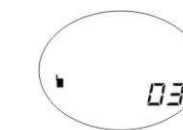


Fig. 20

2. VOX Sensitivity Adjustment

- 2a. In Fig. 2, press ▲/▼ key to enter Fig.16, then press **OK** key to enter Fig. 17 or Fig.18. Select “On” or “Of” Vox status. Press **OK** key to confirm.
- 2b. Press ▲/▼ key to adjust VOX sensitivity level(3 levels).As Fig.20, Vox level=3.
Higher VOX level, higher VOX(MIC) sensitivity;
Lower VOX level, lower VOX(MIC) sensitivity.
- 2c. Press **OK** key to confirm the setting and return to main screen.

Remarks: When transmitting a signal by VOX mode, you could press **PTT** key once to stop VOX transmission function.

Activate / Close the Monitor Function

Monitor function is used during weak transmission, by activating it, all signal in the same channel will be received.

1. In Fig. 2, press ▲/▼ key to enter Fig.21.
2. Press **OK** key to activate MON function, Fig.22.
3. Press **OK** key again to close MON function and return to the main screen.

Remarks: Under MON function, no sub-code will be shown.

Selecting the Call Tone

1. In Fig. 2, press ▲/▼ key to enter Fig.23, then press **OK** key to confirm.
2. Press ▲/▼ key to select Call Tone(1-8), Fig. 24. Call tone demonstration will be heard in each selection.
3. Press **OK** key to confirm the setting and return to main screen.

Selecting Power Output Level

This function can turn power output to different level according to suit different needs.

1. In Fig.2, press ▲/▼ key to enter Fig.25.
2. Then press **OK** key to enter Fig.26 or Fig.27.
3. Press ▲/▼ key to switch “Hi” or “Lo”.
“Hi” means High Power Output: 500mW;
“Lo” means Low Power Output: 10mW.
4. Press **OK** key to confirm and return to the main screen.

Remarks: “Lo” shows when selecting low power output (Fig.28); “Lo” disappears when selecting high power output.

Activate / Close Auto Power Off

1. In Fig.2, press ▲/▼ key to enter Fig.29.
2. Then press **OK** key and show “ON” or “OF”, Fig.30 & Fig.31.
3. Press ▲/▼ key to change “ON” or “OF” to activate or close this function.
4. Press **OK** key to confirm and return to main screen.

Remarks: When selecting “ON”, the icon “” shows on LCD (Fig.32), and the unit will auto

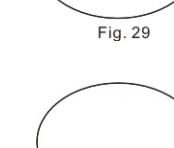
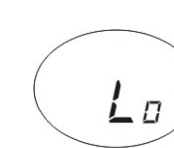
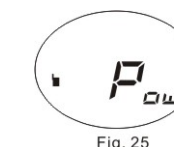
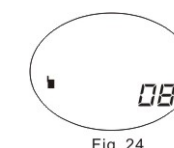
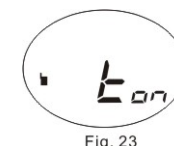
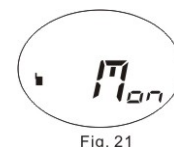


Fig. 30

power off after 30 minutes under standby mode.

Selecting Roger Beep

This function enables the user to hear an ending tone (Roger Beep) after another party end the transmission.

1. In Fig.2, press ▲/▼ key to enter Fig.33, then press **OK** key and “ON” or “OF” shows.
2. Press ▲/▼ key to switch “ON” or “OF”(off).
3. Press **OK** key to confirm and return to main screen.

Remarks: In the Power ON status, default setting for this function is on.

Activate / Close Vibration Alert

1. In Fig.2, press ▲/▼ key to enter Fig.34, then press **OK** key and “ON” or “OF” shows.
2. Press ▲/▼ key to switch “ON” or “OF”(off).
3. Press **OK** key to confirm and return to the main screen.

Remarks: When selecting “ON” and activate Vibration Alert function, icon “⏏ ⏏” shows, Fig.35.

Dual Watch

Under Dual Watch function, user can keep in touch with more than one party in 2 different channels at the same time. The radio will automatically swap between the 2 channels where transmission taken place.

1. Activate Dual Watch Function

- 1a. In Fig.2, press ▲/▼ key to enter Fig.36, and press **OK** key to enter Fig.37. Press ▲/▼ key to select “ON” or “OF”(Fig38).
- 1b. In Fig.37, press **OK** key to activate Dual Watch function.
- 1c. Press ▲/▼ key to select Dual Channel to be monitored (In this case ,DUAL CHANNEL=04). Fig.39
- 1d. Press **OK** key to confirm and enter Dual Sub-Code setting.
- 1e. Press ▲/▼ key to select the Dual Sub-Code. (In this case, Dual Sub-Code = 15).Fig.40
- 1f. Press **OK** key to confirm the setting and return to main screen, “DUAL” shows on LCD. Fig.41.

2. Receiving message from Channel of Dual Watch

- 2a. Under standby mode, if message is received from the DUAL CHANNEL, the channel display will automatically swap to CHANNEL 04, SUB-CODE 15.
- 2b. When transmission is completed, the channel display as Fig.41.
- 2c. Under standby mode, if message is received from the channel 8, sub-code 38, the channel display shows as Fig.42.

Remarks:

- Once signal is received from the dual channel, the main channel and dual channel will automatically swap. LCD will show channel 04 sub-code 15. User can press PTT key and talk direct to the initially dual channel user which is the main channel user now.
- If want to call the dual channel/sub-code, press **Ⓜ** key once to swap the main and dual channel / sub-code. Display on LCD screen as Fig.41.



Fig. 31



Fig. 32



Fig. 33



Fig. 34



Fig. 35



Fig.36



Fig.37



Fig.38



Fig.39

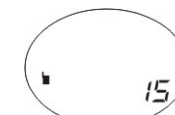


Fig.40



Fig.41

3. Switch off Dual Watch function

- 3a. In Fig.2, press ▲/▼ key to enter Fig.36, and press OK key to enter Fig.37 or Fig.38.
Press ▲/▼ key to select “OF”.
- 3b. In Fig.38, press OK key to switch off Dual Watch function and return to main screen.



Fig.42

Other Functions

Stop Watch


1. In Fig.2, press ▲/▼ key to enter Fig.43.
2. Press OK key to enter Fig.44, the icon “” and “S” shows.
3. Press ▲ key to start counting time. The time is counted in second. Press ▲ key once again to stop counting.
4. Press ▼ key to reset the stop watch, press OK key to return to main screen.



Fig.43



Fig.44

Remark: During the operation of stop watch function, the unit is able to receive signal, and LCD still showing Stop Watch screen when receiving signal. To make transmission, off the stop watch function first by pressing OK key, and then press PTT and CALL as normal.

Key lock or Unlock

1. Press and hold OK key, then press ▲ key to lock the keypad. All keys are disable except PTT/ CALL/ OK+▲ key. (Fig.45)
2. To unlock keypad, repeat the same.



Fig.45

LCD Backlight

LCD Backlight would be on for 8 seconds once any key is pressed.

Low battery Alert

When the battery level becomes low, “Bi Bi” alert will be heard and the battery icon blinks twice in every second. Alert once in every 5 minutes for 30 minutes. The alert sound will stop after 30 minutes, but the battery icon still blinking. When the battery is too low, the unit will power off automatically.

Recharging Function

The battery icon loops and flashes while charging no matter the unit is on or off. It stops flashing when the batteries are fully charged. While charging, PTT key is not available for use.

1. Please charge the rechargeable batteries before first time usage.
2. Use the supplied AC/DC Charger for the unit to charge.
3. Supply power : 7.5V/300mA
4. Charging time is not over 10 hours.

Auto-resume of The Menu

When the menu is opened, if there is no operation in 5 seconds, it will return to the main screen

automatically.

Setting Memory

All setting set before the radio is off are memorized and will automatically resume to it when turning on the radio again.

Fast Changing Of Channels

Use ▲ or ▼ key to select the menu or adjust channels, sub-code, etc., it will change the number sequentially if you press the ▲/▼ key for more than 1 second.

Alert Key

1. Press the alert key for 1.5 second to trigger the alarm.
2. Press the alert key again for 3 seconds to stop the alarm.

Remarks: Alert key can be triggered even the walkie-talkie is off.

TECHNICAL SPECIFICATIONS

<u>Description</u>	<u>Specifications</u>
Power Output	≅ 500mW (High Power Level) ≅ 10mW (Low Power Level)
Operating Frequency	446.00625 ~ 446.09375MHz
Channels	8
Modulation	FM
Communication Range	Un-obstructed conditions: Up to 1 km (Low Power Output) Up to 3 km (2 miles) (High Power Output)
Power Source	1 Li-ion Rechargeable battery (650mAh, 3.6V)
Battery Life	12 hours (5% Transmission, 5% Reception, 90% Standby)
Recharging Time	Fully recharging time not over 10 hours.
LCD	Backlit

PMR446 Transmit-Receive Frequencies (MHz)

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	446. 00625	4	446. 04375	7	446. 08125
2	446. 01875	5	446. 05625	8	446. 09375
3	446. 03125	6	446. 06875		

Interference Eliminator Code Chart

Code	Frequency (Hz)	Code	Frequency (Hz)	Code	Frequency (Hz)
1	67.0	14	107.2	27	167.9
2	71.9	15	110.9	28	173.8
3	74.4	16	114.8	29	179.9
4	77.0	17	118.8	30	186.2
5	79.7	18	123.0	31	192.8
6	82.5	19	127.3	32	203.5
7	85.4	20	131.8	33	210.7
8	88.5	21	136.5	34	218.1
9	91.5	22	141.3	35	225.7
10	94.8	23	146.2	36	233.6
11	97.4	24	151.4	37	241.8
12	100	25	156.7	38	250.3
13	103.5	26	162.2		

Trouble Shooting

Problem	Solution
No Power	- Reposition or replace batteries
Message Not Transmitted	- Make sure the Push-to-Talk button is completely pressed as you transmit. - Reposition or replace batteries
Message Not Received	- Confirm radios have the same channel setting. - Make sure PTT is not inadvertently being pressed. - Obstructions operating indoors or in vehicles may interfere with communication. - Change your location. - Check to make sure volume is loud enough to be heard. - Reposition or replace batteries
Hearing Other Conversation or Noise on a Channel	- Shared channel may be in use, try another.
Limited Talk Range	- Steel/concrete structures between each other, heavy foliage will decrease communication range, check for clear line of sight to improve transmission. - Wearing radio close to body such as in a pocket or on a belt will decrease range, change location of radio.
Heavy Static or Interference	- Radio are too close to each other. Radio must be at least 15 feet apart, increase your distance. - Radio are too far apart. Obstacles interfere with transmission. - Talk range is up to 3 km in clear, unobstructed conditions.

Caution:

- Please avoid charging non-rechargeable batteries in the product as charging operation can only be performed with suitable rechargeable batteries.
- Please use only supplied accessories or optional accessories produce by our company or it might cause defect or damage to the unit.
- Please refer our distributor for optional accessories produce by our company.
- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type. (TSUEN SHING, BT-102)
- To reduce the risk of electric shock, do not expose this appliance to rain or moisture.
- Do not hold the antenna while the radio is in use, or transmissions quality affected.
- Your walkie talkie set has been fully adjusted prior to shipment from the factory. Never open your communicator' s case or adjust the settings inside the communicator.
- Never change or replace anything in your communicator except the battery.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Attention should be drawn to the environmental aspects of battery disposal.(e.g. Before scrapping the appliance, remove the batteries and place them in the appropriate battery connect station.)
- To clean your radio, use a soft cloth dampened with water. Do not use corrosive chemical solvent, they may harm the body of the unit and leak inside, causing permanent damage.