2WAY RADIO WT-418 (FRS+GMRS)
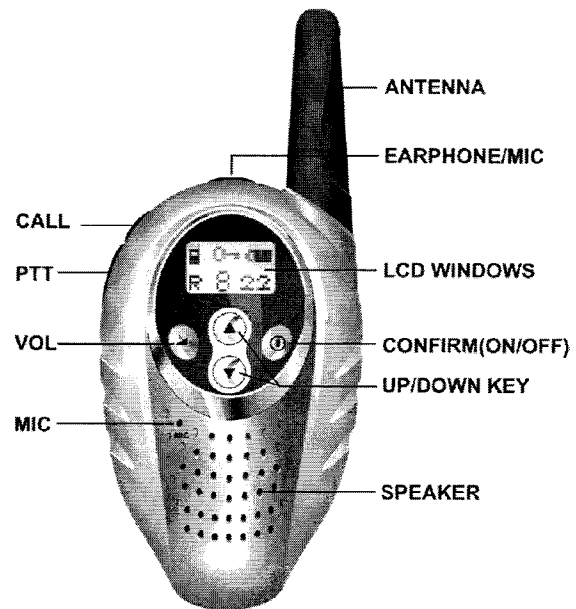
- ANTENNA
- EARPHONE/MIC
- CALL
- PTT
- LCD WINDOWS
- VOL
- CONFIRM(ON/OFF)
- UP/DOWN KEY
- MIC
- SPEAKER

Table of Contents

Main Screen (Fig.1)

1.The Icon

  —📶 Normal Status Ɒ VOX Status

2.Key Lock

3.Battery Icon

  —Full ▰▰

  —Empty ▭ remind you to change the batteries.

  —When ▭ is flashing, batteries changes are must

4.Sub-code

  —CTCSS code (1-38 sub-codes)

  —No display (No any code)

5.Band

  —FRS + GMRS 1-22

6.Condition

  —"R" means receiving —"T" means transmitting
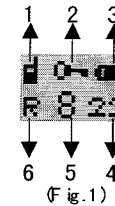
(Fig.1)

Installing Batteries

1.Rotate the belt clip anti-clockwise

2.Open the battery compartment door

3.Install the batteries according to the anode-cathode

  signs shown in the battery compartment

4.Close the battery compartment door.

Note:please use 4 "AAA" batteries.

Quick Guide

1. Start to Operate

A.Turn on the unit: Press ① key for 2 sec., then you

  can hear a "Di", it means the unit is ready.

  (Refer to Fig.2)

B. Unlock Keypad: If the keypad has been locked

  (Refer to Fig.1), press ① key and hold, then press

  ④ key within 1 sec that the lock will be unlocked, and

  a "Di" sound will be heard (Refer to Fig. 2).

(Fig.2)

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2. Communication Operation

A. Make sure the unit is on (Fig. 2).

B. Select the same channel & sub-code as that of your friend's, e.g. (8CH, 22CODE)

  B1-In Fig. 2, press ⊕/⊖ key to enter Fig.3

  B2-Press ⑩ key to enter Fig. 4

  B3-In Fig. 4, press ⊕/⊖ key to select the channel from 1-22. In this case, you need to choose 8.

  B4-Press ⑩ key to confirm the setting and return to the main menu (Fig. 2).

  B5-In Fig. 2, press ⊕/⊖ key to enter Fig. 5.

  B6-Press ⑩ key to enter Fig. 6.

  B7-Press ⊕/⊖ key to select the sub-code from 0 or 1-38. In this case, you need to choose subcode 22.

  B8-Press ⑩ key to confirm the setting and return to the main menu (Fig. 2)

C. Transmitting Signals

  C1-Press the CALL key once to make a call ring tone (Fig. 7), "Call..."means transmitting status.

  C-Press and hold the PTT key while you are talking to the other user. If the device is in the transmitting status, "T" would be displayed on the LCD (Refer to Fig. 8)

D. Receiving Signals

  Release the CALL or PTT key and wait for signal (Fig. 9), "R"means the device is in receiving status. You can hear the call ring tone or the talk from the user.

(Fig.3)

(Fig.4)

(Fig.5)

(Fig.6)

(Fig.7)

(Fig.8)

(Fig.9)

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Functions Setup

1.Walkie Talkie Setup Procedure

A. Setup the Channel

  A1-In Fig. 2, press ⊕/⊖ key to enter Fig. 3

  A2-Press ⑩ key to enter Fig. 4

  A3-Press ⊕/⊖ key to change the channel (1-22)

  A4-Press ⑩ key to return to main menu as in Fig. 2.

B. Changing Subcodes

  B1-In Fig. 2, press ⊕/⊖ key to enter the Fig. 5

  B2-Press ⑩ key to enter Fig. 6

  B3-Press ⊕/⊖ key to change the subcodes sequentially from 0/1 to 38 or the other way round, if pressing for over 1 sec.

  B4-Press ⑩ key to confirm the setting and return to main screen as Fig. 2.

  Remarks:CODE=00, means no subcodes, as in Fig. 10.

C. Volume Adjustment

  C1-In the main menu, press ⊖ key to enter Fig. 11

  C2-In Fig. 11, press ⊕/⊖ key to change the volume level, it'll change the VOL continually if you press the ⊕/⊖ key for more than 1 second.

  C3-Press ⑩ key to confirm the setting and return to the main menu.

D. Changing (SQ)Sensitivity

  D1-In Fig. 2, press ⊕/⊖ key to enter Fig. 12

  D2-Then press ⑩ key to enter Fig. 13

  D3-Press ⊕/⊖ key to change the SQ level

(Fig.10)

(Fig.11)

(Fig.12)

(Fig.13)

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D4-Higher SQ level will have better interference elimination ability, but shorter communication range. Lower SQ level will have lower interference elimination ability comparatively speaking.

D5-Then press ⓞ key again to confirm the setting and return to main menu.

E-Open/Close the VOX & Modulation Sensitivity

Ea—Turn on the VOX

Ea1— In Fig. 2, press ⊕/⊗ key to enter Fig. 14.

Ea2-Press ⓞ the key to enter Fig. 15

Ea3-Press the ⊕/⊗ key to move the arrow on the selectable item 'on".

Ea4-Press ⓞ key to confirm the VOX has been turned on, and return to the main screen as Fig. 16.

Eb—Turn off the VOX

Eb1—In Fig. 16, press ⊕/⊗ key to enter Fig.14

Eb2-Press ⓞ key enter Fig. 17 (after the VOX has been turned on)

Eb3-Press ⊕/⊗ key to move the arrow on the selectable item 'off"

Eb4-Press ⓞ key to turn off the VOX, and return to the main screen

Ec-Changing the VOX Sensitivity

Ec1—In Fig. 15 or 17, press ⊕/⊗ key to move the arrow on the ▷"

Ec2-Press ⓞ key to enter Fig. 18

(Fig.14)

(Fig.15)

(Fig.16)

(Fig.17)

(Fig.18)

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Ec3-Press ⊕/⊗ key to change the sensitivity of VOX.

Ec4-The higher the ▷ level, the higher the VOX (MIC) sensitivity.

The lower the ▷ level, the lower the VOX (MIC) sensitivity.

Ec5-Press the ⓞ key to confirm and return to the main screen.

F. Selecting the Call Tone

F1-In Fig. 2, press ⊕/⊗ key to enter Fig. 19

F2-Press ⓞ key to enter Fig. 20.

F3-Press ⊕/⊗ key to select tone (1-8), ringing tone changes continuously if you press the ⊕/⊗ key for more than 1 sec.

F4-Press ⓞ key to confirm the setting and return to main menu.

G. Activate/Close the MON Function

G1-In Fig. 2, press ⊕/⊗ key to enter the Fig. 21

G2-Press ⓞ key to activate the MON function (Fig. 22)

G3-When MON function is activated, only SQ and VOL are available for use.

G4—In Fig. 22, press ⓞ key to close MON function

H. Activate/Close the Auto-scan of Channel & Sub-Code

Ha-Scan (ON)

Ha1—In Fig. 2, press ⊕/⊗ key to enter Fig. 23

(Fig.19)

(Fig.20)

(Fig.21)

(Fig.22)

(Fig.23)

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Ha2—Press ① key to enter Fig. 24

Ha3—Press ④ /④ key to move to UP /DOWN

Ha4—Press ① key to confirm the scan direction.

Ha5— Both the channel number & the sub-code
    number are changing. it will stop scanning for
    10sec. when it finds a same channel &
    subcode where a transmission is taking place.
    —Press ① key to confirm and stop scanning. (If
    you do not press the ① key, after 10 seconds,
    scanning will take place again. unless you
    switch off the auto-scan function.)

Hb—Scan (OFF) (When the scan is opened)
    In that channel, press ① key to turn off.

2. Setup Other Function

A. LCD Backlit

    A1 -LCD Backlit would be on for about 8 sec. once
        a key is pressed

B. Key Lock or Unlock

    B1 (Key Lock)— In the main screen (Fig. 2). press
    the ① key and hold. then press the ④ key within 1
    sec. You can lock all the keys except PTT key. (e.g.
    Fig. 1).

    B2 (Unlock) — In any locked status. press the ① key
    and hold. then press the ④ key in 1 sec.. you can
    unlock all the keys.

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(Fig.24)

C. 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 after 5 seconds.

D. FastChanging
    —Use the ④ /④ key to select the menu or adjust channel, subcode, etc..
    it will change the channel and subcode number in sequentially if you
    press the ④ /④ key for more than 1 second.

3. Power Off
    — In the main screen (Fig. 2). pressing the ① key for 2 seconds will
    switch off the unit

TECHNICAL SPECIFICATIONS

Description	Specs
Operating Frequency	462.5500-467.7125MHz
Channels	22
Codes	38
Modulation	FM
Talk Range	Unobstructed conditions: Up to 3 km (2 miles)
Power Source	4 AAA Alkaline Batteries or Rechargeable Batteries
LCD	Backlit

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FRS + GMRS 462 transmit-Receive Frequencies (MHz)

BAND	CHANNEL	FREQUENCY	BAND	CHANNEL	FREQUENCY
GMRS/FRS	1	462.5625	FRS	12	467.6625
GMRS/FRS	2	462.5875	FRS	13	467.6875
GMRS/FRS	3	462.6125	FRS	14	467.7125
GMRS/FRS	4	462.6375	GMRS	15	462.5500
GMRS/FRS	5	462.6625	GMRS	16	462.5750
GMRS/FRS	6	462.6875	GMRS	17	462.6000
GMRS/FRS	7	462.7125	GMRS	18	462.6250
FRS	8	467.5625	GMRS	19	462.6500
FRS	9	467.5875	GMRS	20	462.6750
FRS	10	467.6125	GMRS	21	462.7000
FRS	11	467.6375	GMRS	22	462.7250

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		

Troubleshooting of PMR

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 and Interference Eliminator Code settings. Make sure Push-to-Talk is not inadvertently being pressed. Reposition or replace batteries. Obstructions operating indoors or in vehicles may interfere with communication. Change your location. Check to make sure volume is enough to hear.
Hearing Other Conversation or Noise on a Channel	Confirm Interference Eliminator Code is set, (Active settings are 1-38). Shared Channel or Interference Eliminator Code may be in use, try another.
Limited Talk Range	Steel/concrete structures, heavy foliage and use in buildings and in vehicles will decrease 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	Radios are too close. Radios must be at least 15 feet apart, increase your distance. Radios are too far apart. Obstacles interfere with transmission. Talk range is up to 2 miles in clear, unobstructed condition.

CAUTION :

Please avoid charging for non-rechargeable batteries in the product as charging operation can only be performed with suitable rechargeable batteries.

Notice:

During normal operation, separation distance of 1 inch (2.5cm) must be maintained between the antenna of this transmitter and all persons.

For devices less than 200mW ERP

SAFETY INFORMATION

Your wireless hand-held portable transceiver contains a low power transmitter. When the Push-to-Talk (PTT) button is pushed, it sends out radio frequency (RF) signals. In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices.

IMPORTANT: To maintain compliance with the FCC's RF exposure guidelines hold the transmitter and antenna at least 1 inch (2.5 centimeters) from your face and speak in a normal voice, with the antenna pointed up and away from the face. If you wear the handset on your body while using the headset accessory, use only the supplied belt clip for this product and when transmitting, take it out of the belt to ensure that the antenna is at least 1 inch (2.5 centimeters) from your body.

Use only the supplied antenna. Unauthorized antennas, modifications, or attachments could damage the transmitter and may violate FCC regulations.

GMRS Licensing Information

Before any station transmits on any channel authorized in the GMRS from any point within or over the territorial limits of any area where radio services are regulated by the FCC, the responsible party must obtain a license for a GMRS system. An individual 18 years of age or older, who is not a representative of a foreign government, is eligible to apply for a GMRS system license. Application for a GMRS system license is made on FCC Form 605 and you can obtain a copy from the FCC's Web site: http://www.fcc.gov/formpage.html or by calling the FCC's Forms Distribution Center 1-800-418-FORM (3676), or from the fax-on-demand by dialing (202) 418-0177. There is a filing fee. For information on fees, see the FCC's Web site: http://wireless.fcc.gov/csinfo/feeinfo.html.

Warning: Adjustment to this unit or replacement of any transmitter component (crystal, semiconductor, etc.) to this unit that could result in a violation of the rules.

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 needed.
- Consult the dealer or an experienced radio / TV technician for help.