# **Operating Instructions**

0.01W/0.5W Handheld walkie talkie Model NO: RD866















## Safety Information and Warnings

#### **Information on Safe Operation**

Read This Information Before Using Your Radio.

The operation of your radio in Your country is subject to conditions in the following license:

#### **Radio Antenna**

Do not use any radio that has a damaged antenna. If a damaged antenna comes in contact with the skin, a minor burn may result.

Unauthorized antennas, modifications, or attachments could damage the radio and violate compliance.

Do NOT change or modify the antenna.

Do NOT hold the antenna when the radio is "IN USE." Holding the antenna reduces range and may cause bodily harm.

## Safety and general use whilst in a vehicle

Check the State and Federal laws and regulations regarding the use of two way radios in the area where you drive, and always obey them.

## For Vehicles fitted with Air Bags

Do not place your radio in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a radio is placed in the air bag deployment area and the air bag inflates, the radio may be propelled with great force and Cause serious injury to the occupants of the vehicle.

#### **Batteries**

All batteries can cause property damage and/or bodily injury such as burns if conductive material such as jewellery, keys, or Beaded chains touches exposed terminals. The material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

Do not replace or charge batteries in a potentially explosive atmosphere. Contact sparking may occur while installing or removing batteries and cause an explosion.

## **Potentially Explosive Atmospheres**

Turn your radio OFF when in any area with a potentially explosive atmosphere. Sparks in such areas could cause an explosion or fire resulting in injury or even death.

NOTE: Areas with potentially explosive atmospheres are often, but not always clearly marked.

They include fueling areas such as below deck on boats; fuel or chemical transfer or storage facilities;

areas where the air contains chemicals or particles, such as grain, dust, or metal powders;

and any other area where you would normally be advised to turn off your vehicle engine.

# **Blasting Caps and Areas**

To avoid possible interference with blasting operations, turn your radio OFF near electrical blasting caps or in a "blasting area" or in areas posted: "Turn off the two way radio." Obey all signs and instructions.

## **Transmit and Receive Procedure**

Your two-way radio contains a transmitter and a receiver. To control your exposure and ensure compliance with the general population/uncontrolled environment exposure limits, always adhere to the following procedure:

• Transmit no more than 50% of the time. To receive calls, release the PTT button.

To transmit (talk), press the Push to Talk (PTT) button. Transmitting 50% of the time, or less, is important because the radio generates measurable RF energy exposure only when transmitting (in terms of measuring standards compliance).

Always hold the radio approximately 5cm in front of your mouth with the antenna pointing away from your head.

## **Radio Operation and EME Exposure**

Unauthorized antennas, modifications, or attachments could damage the radio and violate Compliance.

Do NOT hold the antenna when the radio is "IN USE." Holding the antenna reduces the effective range.

Do not use the radio if the antenna is damaged. If a damaged antenna makes contact with your skin,

a minor burn can result. If you wear a radio on your body when transmitting, always fit the radio on the belt clip (supplied).

Always ensure the radio and it's antenna are at least 5cm from your body when transmitting.

# **Electromagnetic Interference/Compatibility**

Nearly every electronic device is susceptible to electromagnetic interference (EMI). To avoid the possibility of electromagnetic interference and/or compatibility conflicts, turn off your radio in any location where posted notices instruct you to do so such

as health care facilities.

#### Aircraft

When instructed to do so, turn off your radio when onboard an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.

#### **Medical Devices - Pacemakers**

The Advanced Medical Technology Association recommends that a minimum separation of 6 inches (15cm) be maintained between a handheld wireless radio and a pacemaker. These recommendations are consistent with the independent research by and recommendations of the U.S. Food and Drug Administration. People with pacemakers should:

- ·ALWAYS keep the radio more than 15cm from their pacemaker when the radio is turned ON.
- ·Not carry the radio in the breast pocket.
- ·Use the ear opposite the pacemaker to minimise the potential for interference.
- ·Turn the radio OFF immediately if there is any reason to suspect that interference is taking place.

## Medical Devices -- - Hearing Aids

Some radios may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

#### **Other Medical Devices**

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

#### **General warnings**

Never use your radio outdoors during a thunderstorm. Keep the radio out of reach of babies and young children.

## INSTALLATION

#### Removing the belt clip

Pull the belt clip latch away from the unit.

See picture as right



## **Installing the Batteries**

FOR USE OF RECHARGEABLE BATTERIES:

If your walkie talkie comes with a rechargeable battery, USB cable, dual USB adaptor and dual USB car charger.

The fully charging time is about 12 hours, during charging , there is red light on the LCD screen meanwhile battery icon will flash, when it is charged full, the Red light will be off.

The USB cable, adaptor and car charger will only charge the single ni-mAh rechargeable battery or ni-mAh rechargeable battery pack which provided and not other types of rechargeable batteries. After placing batteries into correct positions, replace the battery cover.

Remarks: Dont charge the alkaline battery

# FOR USE OF NON RECHARGEABLE BATTERIES:

- ${\bf 1. Slide\ down\ the\ battery\ compartment\ cover.}$
- 2.Insert 3 x AAA batteries (not included).
- 3. Position the batteries according to the polarity marking on the battery compartment.

After placing batteries into correct positions, replace the battery cover.

## Low Battery Meter Indicator

The radio can detect the low battery level when the battery voltage goes low. The battery icon will display the low battery status. When battery voltage is low, the empty battery symbol will appear and walkie talkie alaming until it totally drains the battery voltage then you will have to replace the batteries.

# **Transmitting Range**

The talk range will depend on your surroundings and environment it will be affected by obstructions such as hills or buildings. Don't try to use two radio units which are less than 1.5m (5 feet) apart. Otherwise, you may experience interference.

Talk range depends on the terrain. It will be affected by concrete structures, heavy foliage and by operating radios indoors or in vehicles.



**BB** CTCSS Code. Changes from 1 to 38 as selected by the user.

Displays the Battery change level. When the bars are reduced, the battery needs recharging.

- TX Displayed when transmitting a signal.
- **RX** Displayed when receiving a signal.
- DCM Displayed when the Dual Watch function is turned ON.
- vox Displayed when the VOX feature is enabled.

# Operating the unit

## Turning unit on/off:

1-- Switching on

Press and hold the Menu/PWR until you hear a beep sound.

2-- Switching off

Press and hold the Menu/PWR until you hear a beep sound.

## **Adjusting the Volume:**

You have 8 preset volume levels. To raise the volume press the Up / Scan button and to decrease the volume, press the Down /Moni button ,press PTT button or Menu/PWR button to confirm.

## Key lock:

Press & hold Lock button 6second ,the unit will be locked and lock icon will be displayed in the LCD screen ,when the units is locked ,only Torch button , PWR button, PTT button and Lock button can be available ,Press & hold Lock button 3 second,it will be unlocked.

## Torch:

Press and hold the Torch button ,it will be on ,release the button ,it will be off .when the unit is turn off ,the torch stil can be on/off by Torch button

## Auto scan.

Press & hold the Up / Scan button for 2 seconds to activate auto scan, Press & hold the Up / Scan button for 2 seconds to deactivate auto scan Or Press Menu/PWR button to deactivate auto scan.

## Monitor (Zero squelch)

Press & hold the Down/Moni button for 2 seconds to activate monitor.

Press & hold the Down/Moni button for 2 seconds to deactivate monitor.

# **Changing Channels**

You have channels with the legal frequency at your disposal. To communicate with another device, you must both be on the same channel. To change channels, once you have turned your unit on, press the Menu/PWR once and use the Up/Down buttons to scroll through to your desired channel. To set your desired channel, press the PTT button to confirm changes.

Your unit is simplex "one way at a time". While you are speaking, you can not receive a Transmission.

Your unit is an open-- - license band. Always identify yourself when transmitting on the same channel.

IMPORTANT: Before transmitting on a channel listen to ensure it is not already in use.

#### CTCSS/DCS

Press the Menu/PWR button twice and use the Up/ Down to introduce CTCSS/DCS Continuous Tone--Coded Squelch System or CTCSS is a circuit that is used to reduce the annoyance of listening to other users on a shared two--way radio communications channel. It basically allows a private CH on a busy stream.

**CTCSS** = Coded tone controlled squelching system. This allows you to talk on a private sub channel on an active channel. DCS is a digital extension of CTCSS.

**DCS**=DCS is a digital extension of CTCSS.It provides extra, digitally coded, squelch codes that follow after the 38 CTCSS codes. CTCSS 1 to 38 ,followed by DCS 1-83.

## vox

voice operated transmitter ,it allows you to transmit with your voice without pressing the button.

Your communicator is equipped with an adjustable Voice Operated Transmitter(VOX) that can be used for automatic voice transmission.

In this convenient mode, transmission is automatically initiated by speaking into the microphone. There is no need to push the button. By press Menu/PWR button 3 times, screen will display VX character, character OF keep flashing, Press Up or Down button to select voice level (from 1 to 3 level or OF), by press PTT button to confirm setting, VOX default setting as off.

## CA

Call allows you to adjust different tones for calling the operator from the same channel.

Press Menu/PWR button 4 times, screen will display CA character, digital 01 keep flashing, by press UP or Down button to select call tone from 01~10, press PTT button to confirm call tone setting, default setting for call tone is 01.

There are 10 mode call tones in this unit, you and other party can use designed call tone to communicate separately, secretly to avoid any disturb. To activate this feature, With the unit in normal mode, press twice quickly and release the PTT button to send a tone to other users on the same channel.

## TOT

time out timer means the unit will automatically stop transmit after 30sec or 60 sec continuously transmit.

Press Menu button 5 times, screen will display 60 TO, press Up or Down button can choose 60 or 30 seconds or OF. Default setting is 60 seconds, press the PTT button to confirm changes.

# Roger Beep

Roger beep means a tone added to the end of broadcast, it indicates that the user/operator has conclude speaking.

This is a tone which is automatically transmitted whenever the PTT button is released.

This alerts the receiving party that you have ended the transmission, and you are now in receive mode.

Press Menu button 6 times, screen will display ON RO, press Up or down button to choose RO OF or ON, press the PTT button to confirm changes.

## **Key tone**

Symbol on the display when Key tone is opened.

Press Menu button 7 times, screen will display Bell ON, press Up /Scan button to choose ON or Down/Moni button to choose OF. Default setting is ON, press the PTT button to confirm changes.

## DCM

Dual channel monitoring you can monitor between two channels eg: 1 to 8or 9 to 22.

Press Menu button 8 times, screen will display DCM OF, press Down or UP button to choose DCM OF or ON , when choose DCM is on , then press Menu/PWR button one time, scroll Up/Down button to choose channel , the channel can not be same as main channel , press the PTT button to confirm changes.

# Transmitting (sending speech)

The unit is continuously in the Receive mode when the unit is turned ON and not transmitting.

When a signal is received on the current channel, "RX" icon will be displayed on the LCD screen.

- a.Press and hold the PTT (Push to Talk) button to transmit your voice. The transmit signal icon "TX" will display on the LCD screen.
- b. Hold the unit in a vertical position with the Mic (Microphone) 5cm away from the mouth. While holding the PTT button, speak into the microphone in a normal tone of voice.
- c. Release the PTT button when you have finished transmitting. For others to receive your transmission, they must be on the same channel as you.

## Reset the unit

Take away the battery from walkie talkie battery compartment, then hold the Menu/PWR button meanwhile put back the battery to walkie talkie battery compartment in right polarity, the unit will turn on and display CH 100, at this time, release the PTT button.

# Channel and Frequency (MHz)

# Europe(8ch)

Ch.	Frequency	Ch.	Frequency	Ch.	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		

# USA(22ch)

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

# Japan(20ch)

Ch.	Frequency	Ch.	Frequency	Ch.	Frequency	Ch.	Frequency
1	422.0500	7	422.1250	13	422.2125	19	422.2875
2	422.0625	8	422.1375	14	422.2250	20	422.3000
3	422.0750	9	422.1500	15	422.2375		
4	422.0875	10	422.1625	16	422.2500		
5	422.1000	11	422.1750	17	422.2625		
6	422.1125	12	422.2000	18	422.2750		

# P.R. China (20ch)

Ch.	Frequency	Ch.	Frequency	Ch.	Frequency	Ch. Frequency
1	409.7500	7	409.8250	13	409.9000	19 409.9750
2	409.7625	8	409.8375	14	409.9125	20 409.9875
3	409.7750	9	409.8500	15	409.9250	
4	409.7875	10	409.8625	16	409.9375	
5	409.8000	11	409.8750	17	409.9500	
6	409.8125	12	409.8875	18	409.9625	

# IRAN(35ch)

Ch.	Frequency	Ch.	Frequency	Ch.	Frequency	Ch.	Frequency
1	433.0625	10	433.1750	19	433.2875	28	433.4000
2	433.0750	11	433.1875	20	433.3000	29	433.4125
3	433.0875	12	433.2000	21	433.3125	30	433.4250
4	433.1000	13	433.2125	22	433.3250	31	433.4375

5	433.1125	14	433.2250	23	433.3375	32	433.4500	
6	433.1250	15	433.2375	24	433.3500	33	433.4625	
7	433.1375	16	433.2500	25	433.3625	34	433.4750	
8	433.1500	17	433.2625	26	433.3750	35	433.4875	
9	433.1625	18	433.2750	27	433.3875			

# Caution:

# **Battery**

- $1: If you use \ Alkaline \ battery \ , please \ use \ AAA \ size \ battery \ , but \ dont \ attempt \ to \ charge \ alkaline \ batteries.$
- 2:Please dont mix old and new batteries ,it will affect the battery lifetime .
- 3:Do not mix alkaline, standard (carbon-zinc), or rechargeable (Ni-Cd, Ni-MH, etc.) batteries.
- 4:Alkaline battery have expiry time ,please make sure the battery are valid.

# **TROUBLE SHOOTING GUIDE**

PROBLEM	GUIDE
No power or radio switchs off after short time	1:Check charger and correct battery installation. 2:Clean battery contacts(Important!) . 3:Replace battery by fully charged or a new battery . 4:Battery capacity poor:battery defective or at end of lifetime replace battery.
I cannot communicate with other group members	1:Verify,that the channel frequency and the CTCSS are the same in the whole group. If you use factory default programming, this is automatically ok if all members of your group use the same channel number.  2:The other group members are not with the radio coverage.
You can hear the voice from other users, but they cannot hear you	$1{:}Please$ change your setting to exactly the same number as the partners are using .
-	1:Too weak signal-too far away . 2:External mic defective? Please let service technicial check.
I hear too many stations from outside my group	1:Another group is using the same channel number -change channel

# **FCC Warning:**

Any 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.

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.

## Safety Information for Radios

Your wireless handheld portable transceiver contains a low power transmitter. When the talk button is pushed, it sends out radio frequency (RF) signals. The device is authorized to operate at a duty factor not to exceed 50%. In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless devices.

# Important

FCC RF Exposure Requirements: For body-worn operation, this radio has been tested and meets the FCC RF exposure guidelines when used with accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines. Use only the supplied antenna. Unauthorized antennas, modifications or attachments could damage the transmitter and may violate FCC regulations.

# Normal Position

Hold the transmitter approximately 25 mm from your face and speak in a normal voice, with the antenna pointed up and away.