



RCA RDR4220 Professional Digital Two Way Radio User Guide

[Home](#) » [RCA](#) » RCA RDR4220 Professional Digital Two Way Radio User Guide 

RCA RDR4220 Professional Digital Two Way Radio



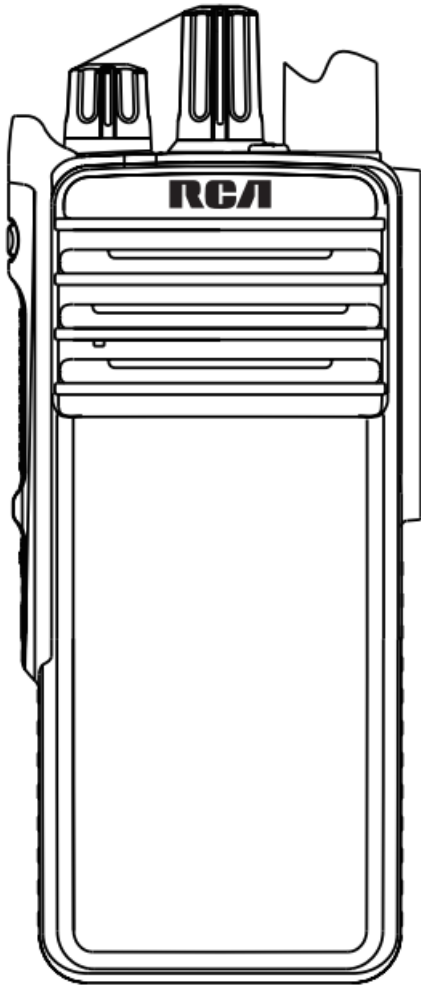
Contents

- 1 What's Included
- 2 Overview
 - 2.1 Programmable Keys
- 3 Basic Operations
 - 3.1 Adjust the volume
 - 3.2 Selecting a channel
 - 3.3 Mode Switch
- 4 Call
 - 4.1 Group Call
- 5 Care and Cleaning
 - 5.1 Radio Care
 - 5.2 Radio Cleaning
- 6 Battery indicator
- 7 Charger LED indicator
- 8 Radio LED indicator
- 9 Display Icons
- 10 RF Exposure / Compliance Information
 - 10.1 FCC Compliance Statement
 - 10.2 ISSED Compliance statement
 - 10.3 Important Safety Information
- 11 Customer Support
- 12 Documents / Resources
 - 12.1 References
- 13 Related Posts

What's Included

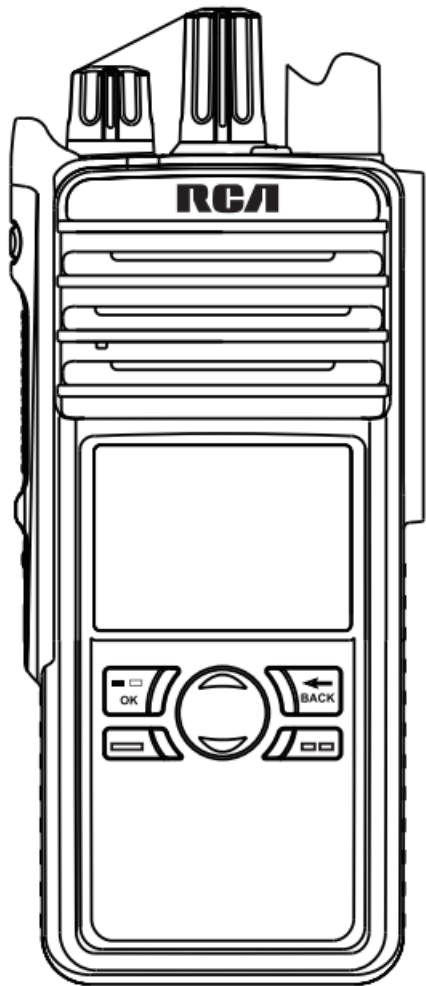
- **RDR4220**

Handheld Radio

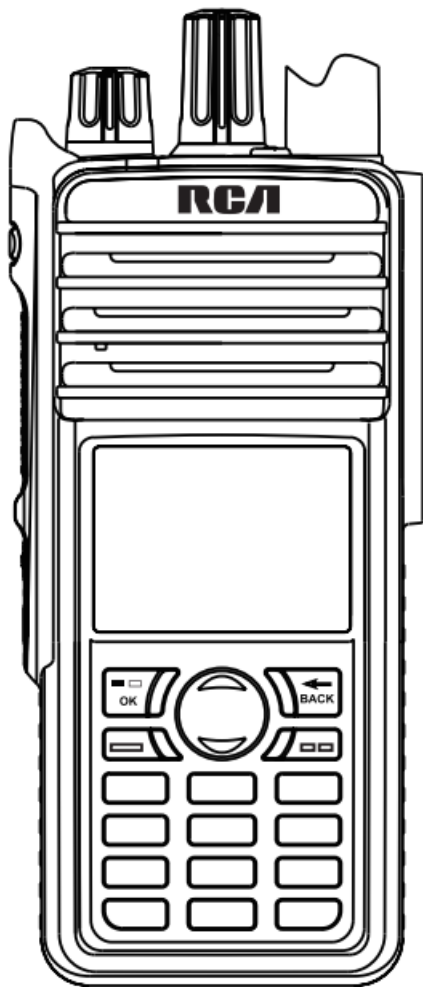


- **RDR4250**

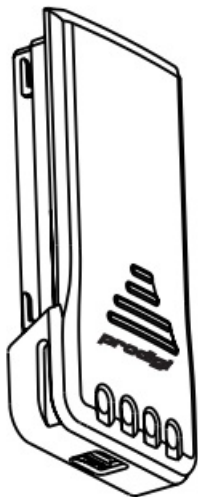
Handheld Radio



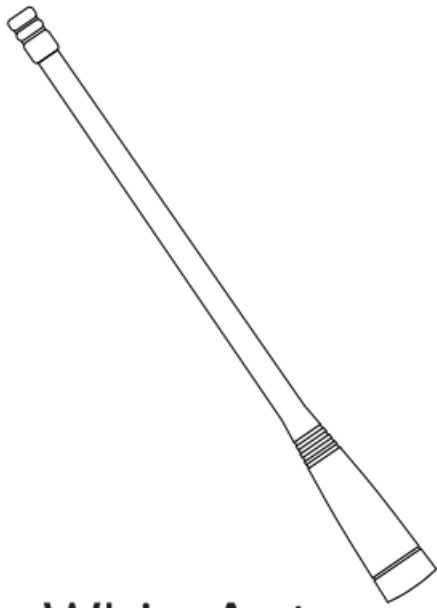
- **RDR4280**
Handheld Radio



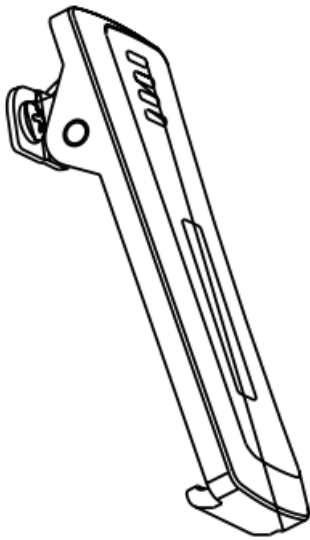
- 2300 mAh Li-Ion Battery



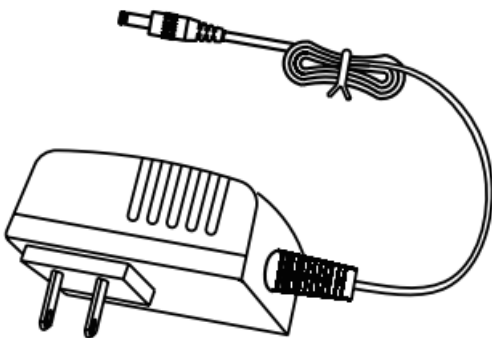
- Whip Antenna VHF or UHF



- Heavy Duty Belt Clip



- Power Supply for Charger Base

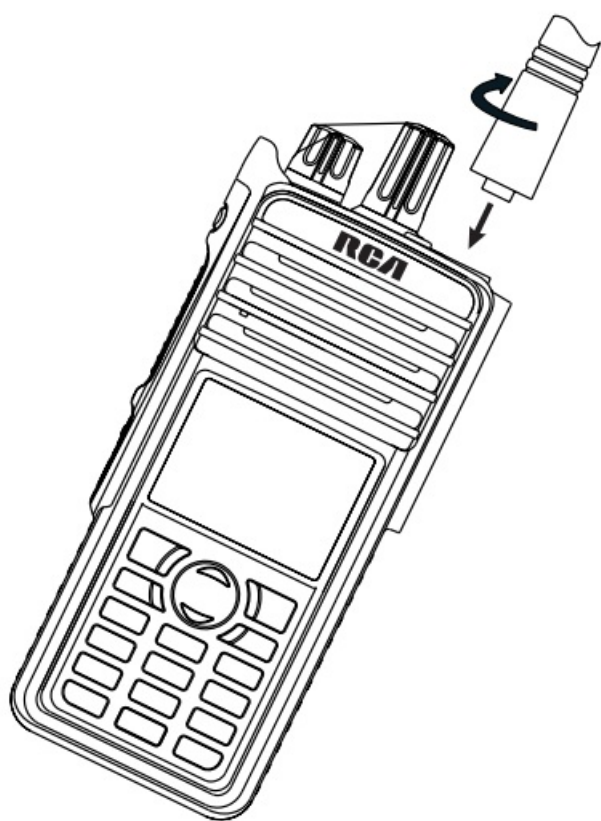


- Desktop Rapid Charger Base



Attaching the Antenna:

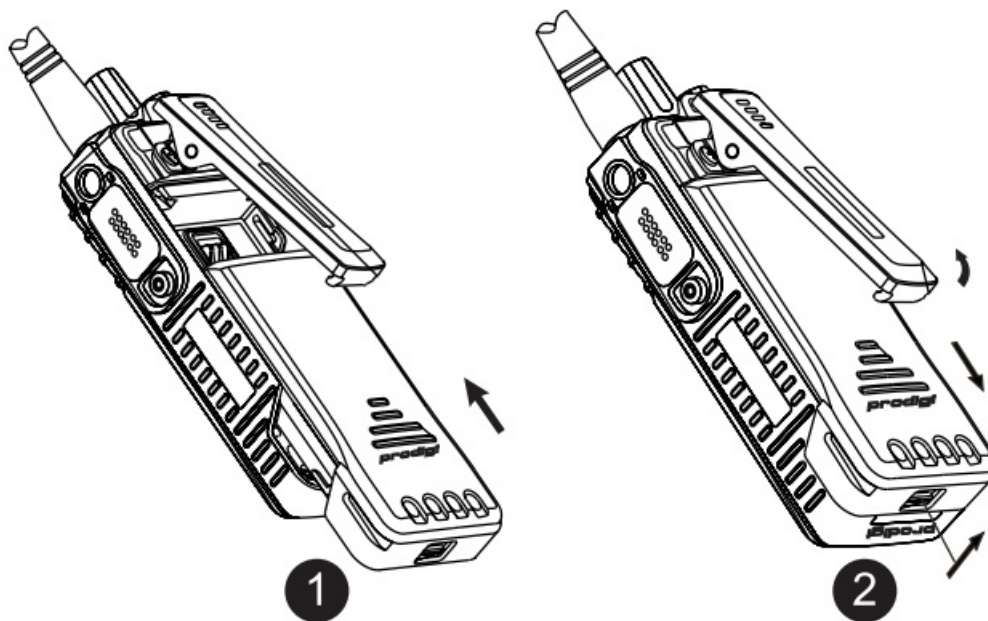
Screw the antenna into the connector at the top of the radio by holding the bottom of the antenna and turn it clockwise until secure.



Attaching the Battery:

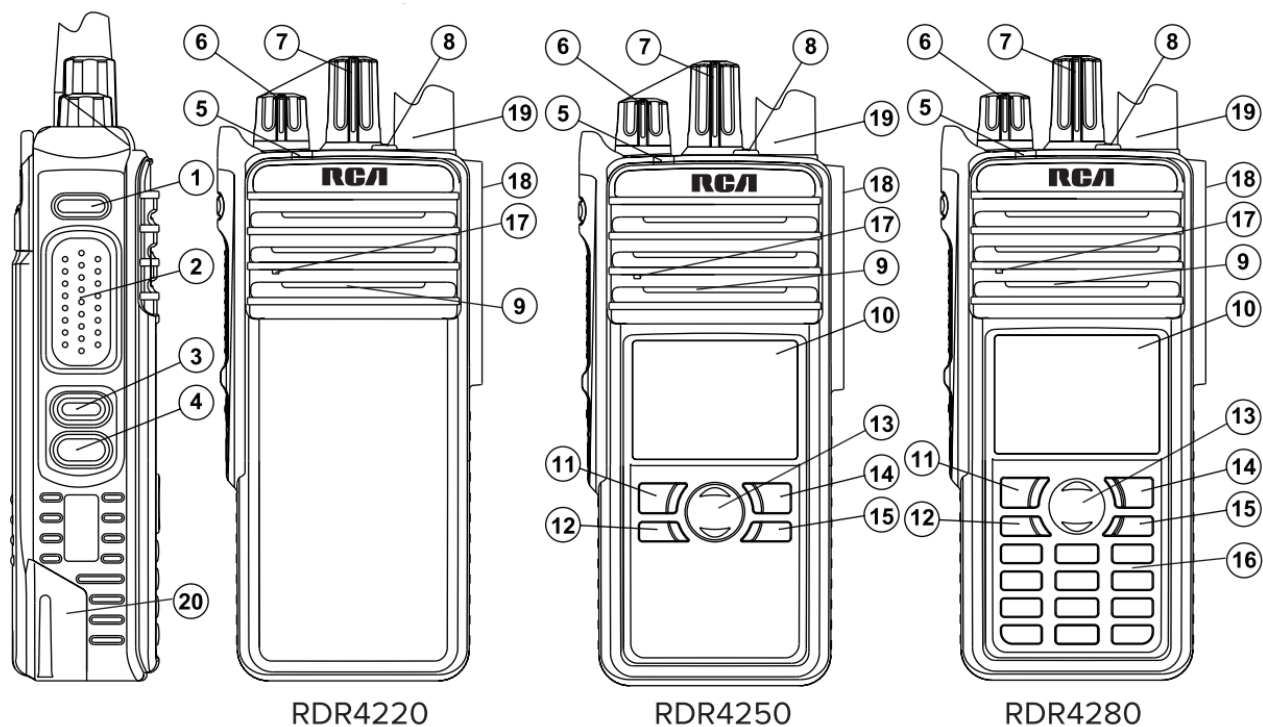
1. To install the battery, place it into the grooves on the radio chassis. If the radio belt clip is installed, press the clip to raise it and slide the battery into position. Slide battery into place, you will hear the latch click and the battery is installed. (See [1](#))
2. To remove the battery from the radio, press the battery latch located on the bottom of the radio, and then slide the battery down about 5mm to release the latch. (See [2](#))

Note: If the battery is not securely locked, remove it and reattach it.



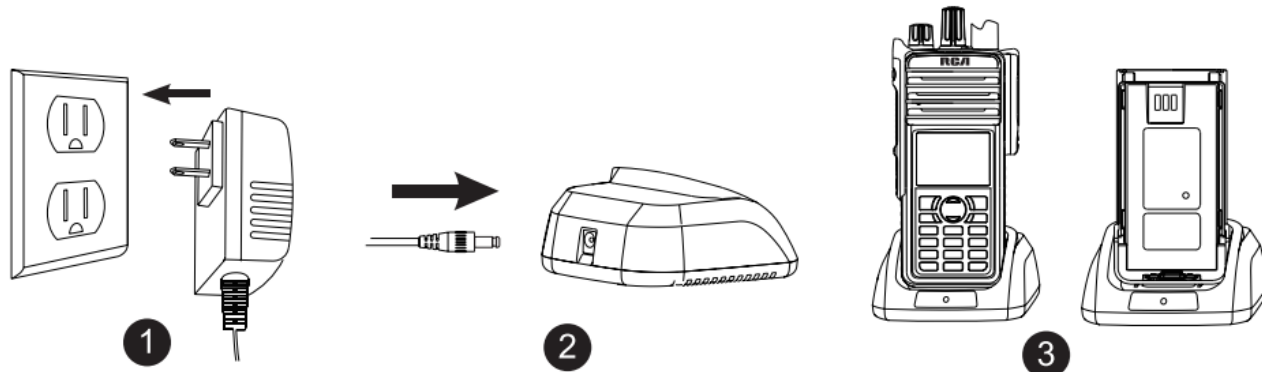
Overview

1. Side Button 1 (Programmable)
2. Push-To-Talk Button (PTT)
3. Side Button 2 (Programmable)
4. Side Button 3 (Programmable)
5. LED Indicator
6. On/Off/ Volume Knob
7. Channel Knob
8. Top Button (Programmable)
9. Speaker
10. Display (RDR42SO / RDR4280)
11. OK/ Menu Button
12. Front Button P1 (Programmable)
13. 2-Way Navigation Button
14. Return/ Home Button
15. Front Button P2 (Programmable)
16. Keypad
17. Microphone
18. Accessory Connector
19. Antenna
20. Battery



Setting Up Your Charger:

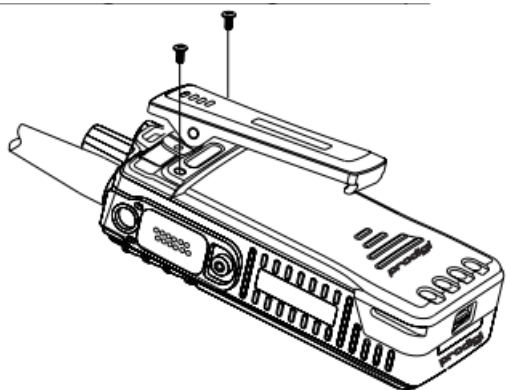
1. Plug the adapter's AC connector into the AC outlet socket. (see 1)
2. Plug the adapter's DC connector into the DC socket on the back of the charger. (2)
3. Place the radio with the battery attached, or the battery alone, in the charger. (see 3)



4. Make sure the battery contact is touching the charging terminals. The charging process begins when the red LED light illuminates.
5. The green LED light will illuminate approximately two hours later, indicating the battery is fully charged.

Attaching/Removing Belt Clip:

Use the 2 screws (M2.5×8.0) supplied with the radio and insert these screws through the holes in the radio clip and into the holes in the aluminum case. If you want to remove the clip from the radio, just unscrew them, and remove the clip. You can put the screws back into the radio to make sure you do not lose them.



ATTENTION:

- Remove battery for easy installation
- Do not use power tools, only screwdriver

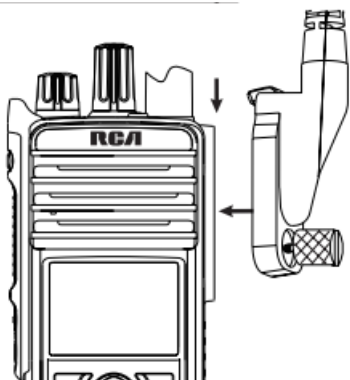
Function Keypad (RDR4250/RDR4280 model)



Attaching audio accessory:

Open the cover of the connector for external speaker/MIC, and then insert the plug of the external speaker or microphone onto the connector socket of the radio. When screwing the accessory plug, make sure it is properly aligned (straight) to ensure the right connection to the connector of the radio.

NOTE: Please loosen the screw prior to removing the audio accessory.



Programmable Keys

[P1] key, [P2] key, [P3] key, and Top Button, can be set as function or menu shortcut keys by your RCA dealer. The function keypad is to help navigate the on-screen menu of RDR4250 or RDR4280.

Basic Operations

Rotate the Radio On-Off/Volume knob clockwise/ counter-clockwise until a click is heard to turn on/ off the radio.

Adjust the volume

After turning the radio on, rotate the Radio On-Off/Volume knob clockwise to increase the volume or counter-clockwise to decrease the volume.

Selecting a channel

Locate the channel number on the Channel Knob rotate it to select the desired channel. While rotating the knob, there is an automated channel number Voice prompt.

Mode Switch

Through Channel Selector knob. Each channel of the radio can be set as analog channel or digital channel by the dealer. The user can set them up through CPS software.

Call

Group Call

Talk group can be set by the dealer in advance and the operation methods are the same under OMO mode and TMO mode.

© Transmitting a group call

1. Select the desired talk group through Channel Knob.
2. Hold down [PTT] key to transmit a group call.

© Receiving and replying a group call

You can receive the group call without any key operation. If reply is needed, please hold down [PTT] key after the speech of the other side and then speak to microphone.

Care and Cleaning

To guarantee optimal performance as well as a long service life of your radio, please follow the tips below.

Radio Care

Keep the radio far away from substances that can corrode the electronic circuit. Do not hold the radio by its antenna or headset cable directly to prevent damage to its normal use.
Attach the accessory jack cover when the radio is not in use.





Radio Cleaning

Clean up the dust and fine particles on the radio surface and charging piece with a clean and dry lintfree cloth or a brush regularly.

Use neutral cleanser and a non-woven fabric to clean the keys, control knobs and front case after longtime use. Do not use chemical preparations such as stain removers, alcohol, sprays or oil preparations, so as to avoid surface case damage. Make sure that the radio is completely dry before use.

NOTE: Turn off the radio and remove the battery before cleaning.

Battery indicator

Battery Usage Status	Audio Indication (RDR4220 model)	Display Indication (RDR42 50 /RDR4 28 0)
Power > 80%	High Battery	
Power > 40%	Medium Battery	
Power < 40%	Low Battery	
Power < 10%	Very Low Battery	

Charger LED indicator









LED Indication	Charging Status
LED Flashes Red Slowly	Standby (no load)
LED Glows Red	Charging
LED Glows Green	Fully Charged
LED Flashes Red Rapidly	Error










Radio LED indicator

LED Indication	Radio Status
Blinking Red	Radio is at low battery indication
Solid Orange	Powering up
Solid Green	Radio is receiving, or detecting activity over the air
Solid Red	Radio is transmitting
Blinking Orange	Radio is scanning, or in selective call, or emergency state
Note: When the LED is solid green, it indicates the radio detects activity over the air. Due to the nature of the digital protocol, this activity may or may not affect the radio's programmed channel.	

Display Icons

The LCD display shows radio status, text entries, and menu entries. The following are icons that appear on the radio's display.

	No Signal	The number of bars displayed represents the radio signal strength and is only displayed while the radio is in receiving mode.
	Received Signal Strength Indicator (RSSI)	The number of bars displayed represents the radio signal strength. Four bars indicate the strongest signal. This icon is only displayed while receiving.
	Battery	The number of bars (0 – 3) shown indicates the charge remaining in the battery.
	Accessory Link	The Accessory Link feature is enabled but there is no remote Accessory Link device connected.
	Accessory Link Connected	The Accessory Link feature is enabled. The icon stays lit when one or more remote Accessory Link devices are connected.
	Scanning	Scan land on Scan feature is enabled.
	Encryption Enable	The Privacy feature is enabled.
	GPS Available	The GPS feature is enabled. The icon stays lit when a position fix is available.

	GPS Not Available / Out of Range	The GPS feature is enabled. The icon stays lit when a position fix is available.
	Accessories Connected	Accessory Connected
	Power Level	Radio is set at Low/High power.
	Direct Mode	Talk around mode .
	Repeater Mode	Repeater mode
	Unread Message	Unread Message
	Missed Call	Missed Call
	VOX Enable	VOX Enable
	Speaker Open	Speaker Open

RF Exposure / Compliance Information

FCC Compliance Statement

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 1: 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.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

ISED Compliance statement

This device complies with ISED license-exempt RSS standard(s).

Operation is subject to the following two conditions:

1. this device may not cause interference, and
2. this device must accept any interference, including interference that may cause undesired operation of the device.

WARNING: Under ISED regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by ISED. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication. The transmitter antenna gain shall not exceed 0 dBi.

Please refer to the following websites for more information on what RF energy exposure is and how to control your exposure to assure compliance with established RF exposure limits. <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01904.html> http://www.ic.gc.ca/eic/site/ceb-bhst.nsf/eng/h_tt00080.html

Important Safety Information

Attention: This radio is restricted to Occupational use only. Before using the radio, read the RF Energy Exposures and Product Safety Guide for Portable Two- Way Radios which contains important operating instructions for safe usage and RF energy awareness and control for Compliance with applicable standards and Regulations.


For a list of RCA Communications Systems approved antennas, batteries, and other accessories, visit the following website: <https://www.rcacommunicationssystems.com>

Customer Support



RCA

Communications Systems

Documents / Resources

	<p>RCA RDR4220 Professional Digital Two Way Radio [pdf] User Guide RDR42X0V, XYH-RDR42X0V, XYHRDR42X0V, RDR42x0 Professional Digital Two Way Radio, RDR42x0, Professional Digital Two Way Radio, Digital Two Way Radio, Two Way Radio, Radio, RDR4220 Professional Digital Two Way Radio, RDR4220</p>
---	---

References

-  [RSS-102 — Radio Frequency \(RF\) Exposure Compliance of Radiocommunication Apparatus \(All Frequency Bands\)](#)
-  [RCA Communications Systems -RCA Communications Systems](#)
-  [RCA Communications Systems -RCA Communications Systems](#)