

Congratulations and Thank You for selecting the PRODIGI RDR2750 Digital Radio Base Station from RCA Communications Systems - The most trusted name in radio!

Our newest digital professional communications products based on DMR technology establishes a benchmark in premium digital two-way radio equipment, made to perform flawlessly under the most demanding commercial conditions. Cutting edge design, high-end professional grade materials and components, simple operation and superior assembly quality: RCA Communications Systems has it all, including our exclusive no-nonsense, two-year "Warranty Protection Program," one of the most comprehensive warranties in the communications industry.

To ensure you achieve maximum performance from your RDR2750 digital radio base station, please be sure to carefully read this manual.

MODELS COVERED IN THIS MANUAL:

- RDR2750V VHF Digital Radio Base Station
- RDR2750U UHF Digital Radio Base Station



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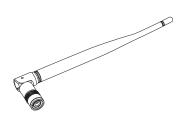
PRODUCT INSPECTION

Prior to unpacking the RDR2750 digital base station radio, please inspect the packaging for signs of damage and report any damage or missing components immediately to your RCA Communications System Sales and Service Center. Every RDR2750 digital base station should come with the following items:

Item	Qty.
RDR2750 -Base Station Radio	1
ANB2750U - Antenna for UHF Models ANB2750V - Antenna for VHF Models	1
MB2750KIT - Mounting Bracket Screw Kit	1



RDR2750Base Station Radio



ANB2750V/U Antenna

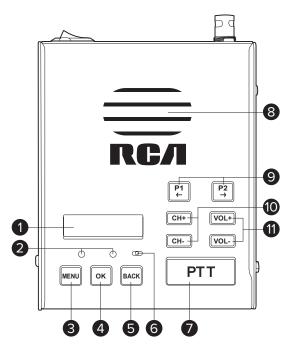


Power Supply



MB2750KIT
Mounting Bracket Screw Kit

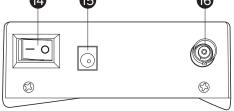
RCA RDR2750 Base Station Overview



- 1 LCD Display
- 2 LED Indicators
- 3 Menu Button
- 4 Ok Button
- 5 Back Button
- 6 Internal Microphone

2 B 4 B

(3)



- Push-To-Talk Button

 13 External Microphone Jack
 - 14 Power On / Off Switch
 - Power Supply Connector
 - 16 Antenna Connector

Note: The frequency band of your RDR2750 is marked on the radio label. If it is not visible, identify the frequency band according to the color code ring on the antenna: red indicates UHF 400-430 Mhz, orange indicates UHF 440-470 Mhz, purple indicates VHF 136-174 Mhz.

Internal Speaker

P1 / P2 Buttons

Buttons

Buttons

Port

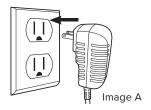
Channel Up / Down

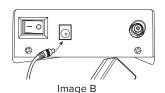
Volume Up / Down

Programming Cable

Connecting the Base Station to Power Outlet

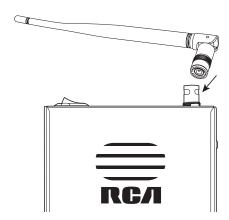
- Plug the adapter's AC connector into the AC outlet socket. (see image A)
- Plug the adapter's DC connector into the DC socket on the back of the base station. (see image B)





Attaching / Removing the Antenna

- 1. With the base station turned off, set the antenna in the antenna connector and turn clockwise to secure it.
- To remove the antenna, turn the base station off and turn the antenna counterclockwise.



Turn On/Off the Base Station

The base station can be turned On/Off by using the power switch.

Note: There is no power up tone if the radio tones/alerts function is disabled. If your base station does not power up, check your connection to the power source. Make sure that power cord is properly attached. If your base station still does not power up, contact your RCA Communications Systems dealer.

Adjusting the Volume

To increase the volume, press the ($^{\text{VOL-}}$) button. To decrease the volume, press the ($^{\text{VOL-}}$) button.

Programmable Buttons

Your RCA Communications Systems Dealer can program the programmable buttons as shortcuts to radio functions or preset channels/groups depending on the duration of a button press:

Short Press - Press and release quickly.

Long Press - Press and hold for the programmed duration (between 1 seconds and 3.75 seconds).

The Programmable Functions are:		
All Alert Tones On/Off	One Touch Access 4	
Emergency On	One Touch Access 5	
Emergency Off	One Touch Access 6	
Nuisance Delete	Repeater/Talkaround	
High/Low Transmit Power	Scan On/Off	
Monitor On/Off	Tight/Normal Squelch	
One Touch Access 1	Encryption On/Off	
One Touch Access 2	Lone Worker On/Off	
One Touch Access 3		

All Alert Tones On/Off - Toggles all tones and alerts on or off.

Emergency On - Initiates an emergency alarm or call.

Emergency Off - Cancels an emergency alarm or call.

Nuisance Delete - Temporarily removes an unwanted channel, except for the Selected Channel, from the scan list. The Selected Channel refers to the user's selected zone/channel combination from which scan is initiated.

High/Low Transmit Power - Toggles transmit power level between high and low.

Monitor On/Off - Monitors a selected channel for activity.

One Touch Access - Directly initiates a predefined Private or Group Call, a Call Alert or a Quick Text message.

Scan On/Off - Toggles scan on or off. Tight/Normal Squelch - Toggles squelch level between tight and normal squelch levels. Privacy On/Off - Toggles privacy (basic voice encryption) on or off.

Lone Worker On/Off - Toggles Lone Worker feature On or Off, on per channel basis.

Push-To-Talk (PTT) Button

The PTT button on the side of the radio has two main functions:

- Press and hold down PTT button to initiate and call and talk.
 Release the PTT button to listen. The microphone is activated when the PTT button is pressed.
- If a call is in progress, the PTT button allows the radio to transmit to the other radios that are part of the call.

Note: If the Talk Permit Tone is enabled, wait until the short alert tone ends before talking.

During a call, if the Channel Free Indication feature is enabled on your radio (programmed by your RCA Communications Systems Dealer), you will hear a short alert tone the moment the target radio (the radio

You can access various radio functions through one of the following ways: A short or long press of the relevant programmable buttons.

Or

- 1. To access the menu, press the button. Press the appropriate representation or representation of rep
- 2. To select a function or enter a sub-menu, press the or button.
- 3. To go back one menu level, or to return to the previous screen, press the BACK button.

Note: Your radio automatically exits the menu after a period of inactivity and returns to your Home screen.

Operational Status Indicators

Your radio indicates its operational status through the following:

- · Display Icons
- · Call Icons
- · Sent Item Icons
- · LED Indicator
- Audio Tones

Display Icons

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

	The following are icons that appear on the radio's display.		
Y.ii	Received Signal Strength Indicator (RSSI)	The number of bars displayed represents the radio signal strength and is only displayed while the radio is in receiving mode.	
Þ	Monitor	Selected channel is being monitored.	
Lor	Power Level	Radio is set at Low power. Radio is set at High power.	
\$	Tones Disable	Radio tones are turned off.	
Z	Scan	Scan feature is enabled.	
- Z - Z - ⊠	Priority Scan	Radio detects activity on channel/group designated as Priority 1 (if • is blinking) or Priority 2 (if • is steady)	
	Unread Message	The Radio has unread message(s) in the inbox.	
\sim	Inbox Full	The radio's Inbox is full.	
	Emergency	Radio is in Emergency mode.	
8	Encryption	The Encryption feature is enabled.	
→	Talkaround	The radio is currently configured for direct radio to radio communication.	
Ħ	Private Call	Indicates a Private Call in progress. In the Contacts list, it indicates a subscriber alias (name) or ID (number).	
mi	Group Call / All Call	Indicates a Group Call or All Call in progress. In the Contacts list, it indicates a group alias (name) or ID (number).	
丝	Sent Successfully	The text message is sent successfully.	
× ₂	Send Failed	The text message cannot be sent.	
X	In-Progress	The text message to a group alias or ID is pending transmission.	

LED Indicator

The LED Indicator shows the operational status of your radio.

Blinking Red - Radio is scanning, Radio is transmitting at low battery condition, receiving an emergency transmission or has failed the self-test upon powering up.

Solid Red - Radio is transmitting.

Blinking Green - Radio is powering up.

Solid Green - Radio is receiving or carrier is present/busy channel.

Rapidly Blinking Green - Radio is receiving a privacy-enabled call or data.

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.

Audio Tones

Alert tones provide you with audible indications of the radio's status or the radio's response to data received.

Continuous Tone - A monotone sound. Sounds continuously until termination.

Periodic Tone - Sounds periodically depending on the duration set by the radio.

Repetitive Tone - A single tone that repeats itself until it is terminated by the user.

Momentary Tone - Sounds only once for a short period of time defined by the radio.

Making and Receiving Calls

Selecting a Zone

Zones are groups of channels.

*RDR2750 offers up to 250 zones with a maximum of 16 channels per zone.

- 1. Press the [MENU] key to access the menu.
- 2. Press [P1] or P2] to scroll to the Zone Menu.
- 3. Press [ok] to select.
- 4. The display shows the current Zone.
- 5. Press [P1] or P2] to desired Zone and press [ox] to select.
- The selected Zone displays momentarily then returns to the selected zone screen.

Selecting a Channel, Subscriber ID or Group ID

Once the required zone is displayed (if you have multiple zones in your radio), turn the programmed Channel Selector Knob to select the desired channel or by using the radio's Menu navigate to the desired subscriber alias or ID, or group alias or ID.

Receiving and Responding to a Group Call

To receive a call from a group of users, your radio must be configured as part of that group. When you receive a Group Call:

- 1. The LED blinks green.
- 2. The first line of the display shows the caller alias, and the RSSI icon. The second line displays the group alias and the Group Call icon.

3. Press the [PTT] button to respond to the call and the LED indicator lights up red.

Note: If Talk Permit Function is enabled, wait for the Talk Permit Tone to finish and then speak clearly into the microphone.

- 4. Release the [PTT] button to listen again.
- 5. If there is no voice activity for a set period of time, the call ends.

Receiving and responding to an Individual Call

A Private Call is a call from an individual radio to another individual radio. There are two types of Individual Calls. The first type is when a radio presence check is performed prior to setting up the call, while the other sets up the call immediately. When you receive a Private Call:

- 1. The LED blinks green.
- The first line of the display shows the subscriber alias or ID, and the RSSI icon. The second line displays Private Call and the Private Call icon.
- Press the [PTT] button to respond to the call and the LED indicator lights up red.
- 4. If Talk Permit Function is enabled, wait for the Talk Permit Tone to finish and then speak clearly into the microphone.
- 5. Release the [PTT] button to listen again.
- 6. If there is no voice activity for a set period of time, the call ends.

Receiving and All Call

An All Call is a call from an individual radio to every radio on the channel. It is used to make important announcements requiring all radio user's full attention. When you receive an All Call:

- 1. The LED blinks green.
- The first line of the display shows the subscriber alias or ID, and the RSSI icon. The second line displays All Call and the All Call icon.
- 3. Once the All Call ends, the radio returns to the previous screen before receiving the call

Note: The radio stops receiving the All Call if you switch to a different channel while receiving the call.

Making a Radio Call

You can select a channel, subscriber ID, or group by using:

- · The channel buttons
- The programmable buttons
- · The contacts list
- Manual Dial (using contacts list)—This method is for Private Calls only and is dialed using the keypad.

Note: Keypad speaker mic is required, sold Separately. Please contact your RCA Communications Systems dealer for more info.

Making a Group Call

- To make a call to a group of users, your radio must be configured as part of that group. Use the Channel Selector buttons to select the channel with the active group alias or ID.
- Press the [PTT] button to make the call. When the target radio responds, the LED lights up green. The first line displays Group Call. The second line displays subscriber alias or ID. Note: If Talk Permit Function is enabled, wait for the Talk Permit Tone to finish, then speak clearly into the microphone.
- 3. Release the [PTT] button to listen.
- If there is no voice activity for a predetermined period of time, the call ends. The radio returns to the screen you were on prior to initiating the call.

Making a Private Call

- Use the Channel Selector buttons to select the channel with the active subscriber alias or ID.
- Press the [PTT] button to make the call. The LED lights up solid red. The first line displays the subscriber alias or ID. The second line displays Private Call and the Private Call icon. Note: If Talk Permit Function is enabled, wait for the Talk Permit Tone to finish and then speak clearly into the microphone.
- 3. Release the [PTT] button to listen. When the target radio responds, the LED lights up solid green.
- 4. If there is no voice activity for a predetermined period of time, the call ends. The radio returns to the screen last viewed prior to initiating the call.

Making an All Call

This feature allows you to transmit to all users on a channel. Your radio must be programmed to allow you to use this feature.

- Use the Channel Selector buttons to select the channel with the active All Call group alias or ID.
- Press the [PTT] button to make the call. The LED lights up solid red and the display shows the All Call group alias or ID, and the All Call icon

Note: Users on the channel cannot respond to an All Call.

Making a Group or Private Call with the One Touch Access Button

The One Touch Access feature allows you to make a Group or Private Call to a predefined alias or ID easily. This feature can be assigned to a short or long programmable button press. You can only have one alias or ID assigned to a One Touch Access button. Your radio can have multiple One Touch Access buttons programmed.

- Press the programmed One Touch Access button to make a Group or Private Call to the predefined alias or ID. The display shows the group/subscriber alias or ID.
- Press the [PTT] button to make the call. The display shows the group/subscriber alias or ID, and the Group/Private Call icon. Note: If Talk Permit Function is enabled, wait for the Talk Permit Tone to finish, then speak clearly into the microphone.
- Release the [PTT] button to listen. When the target radio responds, the LED blinks green.
- If there is no voice activity for a predetermined period of time, the calls end. Radio returns to the screen you were on prior to initiating the call.

Emergency Operation

An Emergency Alarm is used to indicate a critical situation. You can initiate an Emergency at any time on any screen display regardless of any activity on the current channel.

Note: This function is available only in digital mode.

Your radio supports 5 Emergency Alarms:

- · Emergency Alarm
- · Emergency Alarm with Call
- · Emergency Alarm with Voice to Follow

Each alarm has the following default setting:

Disabled: Radio cannot transmit alarm signal, but can receive alarm from other radios. Each alarm has the following types:

Regular: Radio transmits an alarm signal and shows audio and/or visual indicators.

Silent: Radio transmits an alarm signal without any audio or visual indicators. There will be no response (call) from the target radio until you press the [PTT] button to initiate the call.

Silent with Voice: Radio transmits an alarm signal and is able to receive an incoming call, without any audio or visual indicators, until you press the **[PTT]** button to initiate, or respond to the call.

Initiating & Responding to Emergency Alarm

- 1. To initiate an Emergency Alarm press the programmed Emergency button. The LED lights up solid red. The display shows Sending Alarm, which alternates with your radio ID. Emergency icon appears on the Home screen display. When an Emergency Alarm acknowledgment is received, an alert tone sounds and the display shows Emergency Alarm Successful. At this point depending on the setting selected you can press the [PTT] to talk or your radio's microphone is automatically activated, allowing you to communicate with the other radio without pressing the [PTT] button.
- To Respond to an Emergency Alarm Press any button to stop all Emergency Alarm received indications. Press [PTT] button to initiate a call with the emergency initiating radio.

Exiting Emergency Mode

Your radio exits Emergency mode automatically when any of the following occurs:

- Emergency Alarm acknowledgment is received (for Emergency Alarm only), OR
- All retries to send the alarm have been exhausted, OR
- The Emergency Off button is pressed, OR
- The [PTT] button is pressed

Note: If your radio is powered off, it exits the Emergency mode. The radio will not re-initiate the Emergency mode automatically when it is turned on again.

Advanced Features

Radio Check

If enabled, this feature allows you to determine if another radio is active in a system without disturbing the user of that radio. No audible or visual notification is shown on the target radio.

Note: This feature is only applicable for subscriber aliases or IDs in digital mode.

Sending a Radio Check

Using the programmed Radio Check button.

- 1. Press [BACK] to access the menu.
- 2. Press [P] or P] button to navigate to Contacts and press the [ok] to select.
- 3. Press [2] or [2] button to the required subscriber alias or ID and press [6] to select. Or press [6] button to Manual Dial, then press [6] twice, input subscriber ID, then press [6] button.
- 4. Press [Pt] or Pt] button to Radio Check, then press [ok] button.
- 5. The display shows Radio Check: <Subscriber Alias or ID>, indicating that Radio Check is in progress. The LED lights up red.
- If the target radio is active in the system, a tone sounds and the display briefly shows Target Radio Available OR if the target radio is not active in the system, a tone sounds and the display briefly shows Target Radio Not Available.

7. Press the button is pressed while the radio is waiting for acknowledgment, the radio terminates all retries and exits Radio Check mode.

Remote Monitor

Allows the radio to send Remote Monitor command to another radio. This command activates the receiving radio's microphone and transmitter for the duration specified for the receiving radio in the Remote Monitor Hot Mic Time under the Decode Settings. The receiving radio is controlled remotely without any indication given to the receiving radio user.

Note: Your radio must be programmed by your RCA Communications Systems dealer to allow you to use the Remote Monitor feature.

Initiating Remote Monitor

Use the programmed **Remote Monitor button**.

- 1. Press [MENU] to access the menu.
- 2. Press [P] or P] button to navigate to Contacts and press the or loss loss to select.
- 3. Press [or] button to the required subscriber alias or ID and press [or] button to select Or press [or] button to Manual Dial, then press [or] twice. Input subscriber alias or ID and press [or] button.
- 4. Press [P1 or P2] button to Remote Monitor and press [ok] button.
- 5. The screen will display remote monitor: <Subscriber alias or ID>, indicating that Remote Monitor is in progress. The LED blinks red.
- 6. The display shows Remote Monitor Successful OR The display shows Remote Monitor Failed.
- 7. If successful, the radio will start receiving audio from the monitored radio for a programmed duration. Once the timer expires the LED turns off.

Contacts Setting

Contacts provide an address book capabilities to your radio. Each entry corresponds to an alias or ID that you use to initiate a call. The entries are sorted in the order they are entered in the Contacts List. Each entry is associated with a different call type: Group Call, Private Call or All Call.

Note: You can add, delete, or edit contacts from the Digital Contacts list

Making a Group Call from Contacts

- 1. Press [MENU] to access the menu.
- 2. Press [r or r button to navigate to Contacts and press the or button to select. All entries are alphabetically sorted.
- 3. Press [Pt] or Pt] button to the required group alias or ID.
- 4. Press [PTT] button to make the call. The LED lights up solid red. The display shows Group Call icon, the group alias or ID, and the Group Call icon.
- 5. Release the **[PTT]** button to listen, when any user in the group responds, the LED blinks green. You see Group Call icon, the group ID, and that user's ID on your display.
- 6. If there is no voice activity for a programmed period of time, the call ends.

Note: If Talk Permit function is enabled, wait for the Talk Permit Tone to finish and then speak clearly into the microphone.

Making an Individual Call from Contacts

- 1. Press [MENU] to access the menu.
- 2. Press [P] or [P] button to navigate to Contacts and press the low button to select.
- 3. Press [P] or P] button to navigate to desired subscriber alias or ID or Manual Dial option and press [ok] twice. Use the keypad to input the subscriber ID. The second line displays Private Call and the Private Call icon.

Note: Keypad speaker mic is required, sold separately. Please contact your RCA Communications Systems dealer for more info.

- Press the [PTT] to make the call. The first line displays the subscriber alias or ID and the second line displays Private Call and the Private Call icon.
- 5. Release the **[PTT]** to listen. When the target radio responds, the LED blinks green and the display shows the transmitting user's ID.
- 6. If there is no voice activity for the programmed period of time then the call ends.

Note: If Talk Permit function is enabled, wait for the Talk Permit Tone to finish and then speak clearly into the microphone.

Call Log Feature

Your radio keeps track of all recent outgoing, answered, and missed Individual Calls. Use the call log feature to view and manage recent calls. You can Store an ID from the Call Log to Contacts or Delete it. The Call Log lists are Outgoing, Incoming, and Missed.

Note: When you select a Call List and it contains no entries, the display shows List Empty.

Accessing the Call Log

Use the programmed Remote Monitor button.

- 1. Press [MENU] to access the menu.
- 2. Press [P] or P] button to navigate to Call Log and press the OK to select.
- 3. Press [1] or [2] button to navigate to the desired list and press [ok] to select. The most recent entry is displayed first.
- 4. Use the [P1] or P2] buttons to scroll through the list.
- 5. Press the [PTT] to initiate a call.

Storing an Alias or ID from the Missed Call List

- 1. While viewing an entry from the Call Log list press [or] to select.
- 2. Press [P1 or P2] button to navigate to [Store].
- 3. Press ok
- 4. Use the keypad to input a name.

Note: Keypad speaker mic is required, sold separately. Please contact your RCA Communications Systems dealer for more info.

- 5. Press [ox] to confirm.
- 6. The display shows Contact Saved.

Deleting a Call from a Call List

- 1. While viewing an entry from the Call Log list press [ok] to select.
- 2. Press [P1 or P2] button to navigate to [Delete].
- 3. Press [ok].
- 4. Press [ok] again to confirm.

- 5. The display shows Entry Deleted.
- 6. Press [ok] again to return to main menu.

Call Alert Operation

Call Alert paging enables you to alert a specific radio user to call you back when they are able to do so.

This feature is applicable for subscriber aliases or IDs only and is accessible through the menu via Contacts or manual dial.

Receiving and responding to a Call Alert

When you receive a Call Alert page, on the display you see Call Alert that alternates with the alias or ID of the calling radio.

- 1. LED blinks red.
- 2. Press and release **[PTT]** button to confirm the prompt, or press or button to select "Ignore?" and to exit the Call Alert.

Making a Call Alert from the Contact List

- 1. Press [MENU] to access the menu.
- 2. Press [P1 or P2] to navigate to Contacts and press [OK] to select.
- 3. Press [P] or P] to the desired subscriber alias or ID and press [N] to select or Press [P] or P] to the Manual Dial option and press [N] twice. Use the keypad to input the subscriber ID.
- 4. Press [Pt] or Pt] to Call Alert and press [ox].
- The display shows Call Alert: <Subscriber Alias or ID>, indicating that the Call Alert has been sent.
- 6. The LED lights up red when your radio is sending the Call Alert. If the Call Alert acknowledgment is received, a tone sounds and the display shows Call Alert successful. OR if the Call Alert acknowledgment is not received, a tone sounds and the display shows Call Alert Failed.

Sending a Quick Text Message

Your radio supports a maximum of 50 Quick Text messages as programmed by your RCA Communications Systems dealer. While Quick Text messages are predefined, you can edit each message before sending it.

- 1. Press [MENU] to access the menu.
- 2. Press or or to navigate to Messages.
- 3. Press [P1] or P2] to Quick Text and press [OK] to select.
- 4. Press [Pt] or [P2] to the desired Quick Text and press [os] to select. A blinking cursor appears. Use the keypad to edit the message, if needed. Press [Pt] to move one space to the left. Press [P2] key to move one space to the right. Press [* DEL] key to delete any unwanted characters.
- 5. Press [P] or [P2] button to send or store once message is completed.
- 6. Select Send and press [P] or [P] to the required alias or ID and press [ox] to send the message, or press [P] or [P] to Manual Dial, press [ox] button, input subscriber ID and press [ox] button.
- 7. The display shows Text Message: <Subscriber/Group Alias or ID>, confirming your message is being sent.

Note: Keypad speaker mic is required, sold separately. Please contact your RCA Communications Systems dealer for more info.

8. If the message is sent successfully, a tone sounds and the display shows Message Sent. OR if the message cannot be sent, a high tone sounds and the display show Message Send Failed. If the text message fails to send, the radio returns you to the Resend option screen.

Note: If programmed by your RCA Communications Systems dealer you can also press One Touch Access button to send a predefined Quick Text message to a predefined alias or ID.

Managing Fail-to-Send Text Messages

You can select one of the following options while at the Resend option screen:

- · Resend
- Forward
- Edit

Resend Text Message

- 1. Press or ID.
- If the message is sent successfully, a tone sounds and the display shows Message Sent. OR if the message cannot be sent, the display shows Message Send Failed.

Forwarding a Text Message

Select Forward to send the message to another subscriber/group alias or ID.

- 1. Press [P] or P2 button to navigate to Forward and press the ok to select.
- 2. Press (Pt or P2 to navigate to the required alias or ID and press to send. OR press (Pt or P2 to navigate to Manual Dial and press (ox), input subscriber ID then press (ox) button.

Note: Keypad speaker mic is required, sold separately. Please contact your RCA Communications Systems dealer for more info.

- 3. The display shows Text Message: <Subscriber/Group Alias or ID> confirming your message is being sent.
- 4. If the message is sent successfully, a tone sounds and the display shows Message Sent. If the message is not sent, a high tone sounds and the display shows Message Send Failed.

Editing a Text Message

Select Edit to edit the message before sending it.

- 1. Press [P] or P2 button to navigate to Edit and press or to select.
- 2. A blinking cursor appears beside the message. Use the keypad to edit your message. Press [Pt] to move one space to the left. Press [Pt] key to move one space to the right. Press [* DEL] key to delete any unwanted characters.

Note: Keypad speaker mic is required, sold separately. Please contact your RCA Communications Systems dealer for more info.

- 3. Press ox button to send or store once message is completed.
- 4. Select Send and press [P] or [P] to navigate to the desired alias or ID and press [N] to send the message, or press [P] or [P] to navigate to Manual Dial, press [OK] button, input subscriber ID and press [OK] button.

- The display shows Text Message: <Subscriber/Group Alias or ID>, confirming your message is being sent.
- If the message is sent successfully, a tone sounds and the display shows Message Sent. If the message cannot be sent, a high tone sounds and the display shows Message Send Failed.

Managing Sent Text Message

Once a message is sent to another radio, it is saved in Sent Items. The most recent sent text message is always added to the top of the Sent Items list.

The Sent Items folder is capable of storing a maximum of fifty (50) last sent message. When the folder is full, the next sent text message automatically replaces the oldest text message in the folder.

Note: Press [BACK] at any time to return to the previous screen.

Viewing Sent Text Messages

- 1. Press [MENU] to access the menu.
- 2. Press $[P^1]$ or $[P^2]$ to navigate to Messages and press [ok] to select
- 3. Press [P1 or P2] to navigate to Sent Items and press [ox] to select.
- 4. Press [P1] or P2] to navigate to the desired message and press [OK] button.

You can select one of the following options while viewing a sent text message:

- Resend
- Forward
- Edit
- Delete

To perform any of the function press [ox] again while viewing the message.

To perform any of the functions:

- 1. Press or again while viewing message.
- 2. Press [P] or P] to navigate to Resend, Forward, Edit or Delete and press or to select.
- If you select [Resend] or [Edit] and then [Send] the display will show Text Message: <Subscriber/Group alias or ID>, confirming that the same message is being sent to the same target radio.
- 4. If the message is sent, a tone sounds and the display shows Message Sent. If the message is not sent, a high tone sounds and the display shows Message Send Failed. The radio returns to the Resend option screen. Press [or] to resend the message to the same subscriber/group alias or ID.

Deleting All Sent Text Messages from the Sent Items

- 1. Press [MENU] button to menu mode.
- 2. Press [P1] or P2] to navigate to Messages and press [OK] to select.
- 3. Press [P1] or P2] to navigate to Sent Items and press [ok] to select.
- 4. Press [P1 or P2] to navigate Delete All and press [OK] to select.
- 5. The display shows Delete Message?, press or to confirm. The display shows Sent Items Cleared.

Receiving a Text Message

When your radio receives a message, the display shows the alias or ID of the sender and the Message icon at the far left of the screen.

You can select one of the following options when receiving a text message:

- Read?
- Read Later
- Delete

Reading a Text Message

- 1. Press [P1] or P2] to navigate to [Read] and press [OK] to select.
- 2. Selected message in the Inbox opens, press or to return to Home Screen or press or press enter into Read Later or Delete option screen.
 - Select Read Later to return to the screen you were on prior to receiving the text message.
 - · Select Delete to delete the text message

Managing Received Text Message

Use the Inbox to manage your text messages. The Inbox is capable of storing a maximum of 10 messages. Your radio supports the following options for text messages:

- View
- Reply
- Forward
- Delete
- Delete All

Text messages in the Inbox are sorted according the date they were received.

Press the [BACK] button at any time to return to the previous menu.

Viewing a Text Message from the Inbox

- 1. Press [MENU] to access the menu.
- 2. Press [P] or [P] to navigate to Messages and press [ok] to select.
- 3. Press $[P_+^1]$ or $[P_+^2]$ to navigate to Inbox and press [I] to select.
- 4. Press [ok] to view the current message. Unread messages are indicated with an exclamation mark. (!)

Replying to a Text Message from the Inbox

- 1. Press [MENU] to access the menu.
- 2. Press [P1] or [P2] to navigate to Messages and press [ox] to select.
- 3. Press [P] or P] to navigate to Inbox and press [ox] to select.
- 4. Press ox to select current message, and press ox to select.

 Press ox again to access the sub-menu and select Reply, Forward or Delete the message.
- 5. Press [P] or P] to navigate to Reply and press [ok] to select.
- 6. Press [1] or [2] to navigate to Write and press [ox] to select. A blinking cursor appears. Use the keypad to write your message OR press [1] or [2] to navigate to Quick Text and press [ox]. After selecting the desired message press [ox] button. A blinking cursor appears. Use the keypad to edit your message, if required.

Note: Keypad speaker mic is required, sold separately. Please contact your RCA Communications Systems dealer for more info.

- 7. Press [ox] to send and [ox] again to confirm.
- The display shows Text Message: <Subscriber/Group Alias or ID>, confirming your message is being sent.
- If the message is sent successfully, a tone sounds and the display shows Message Sent. If the message cannot be sent, the display shows Message Send Failed. If the message fails to send, the radio returns to the Resend option screen.

Deleting a Text Message from the Inbox

- 1. Press [MENU] to access the menu.
- 2. Press [P1 or P2] to navigate to Messages and press [ok] to select.
- 3. Press [P1] or P2] to navigate to Inbox and press [OK] to select.
- 4. Press or to select current message, and press or to select. Press again to access the sub-menu to Reply, Forward or Delete the message.
- 5. Press [P] or P] to navigate to Delete and press [OK] to select.
- 6. At Delete Message?, press [P] or [P] to navigate to Yes and press [ox]. The display shows Message Deleted.

Note: When you select the Inbox and it contains no text messages, the display shows List Empty.

Encryption

If enabled, this feature helps to prevent eavesdropping by unauthorized users on a channel by the use of a software based scrambling solution.

Your radio must have encryption enabled on the channel to send an encryption-enabled transmission. To unscramble a encryption-enabled call or data transmission, your radio must be programmed by your RCA Communications Systems dealer to have the same Encryption Key Value and Encryption Key ID as the transmitting radio. If your radio receives a scrambled call that is of a different Encryption Key Value and Encryption Key ID, you will hear a garbled voice transmission.

The LED lights up solid green while the radio is transmitting and blinks green rapidly when the radio is receiving an ongoing encryption-enabled transmission.

You can pre-program 16 groups encryption keys by software, press programmed Encryption button to Turn On or Turn Off Encryption. You can also turn on and off the Encryption through the Menu of the radio.

- 1. Press [MENU] to access the menu.
- 2. Press [P1] or P2] to navigate to Utilities and press [OK] to select.
- 3. Press [P1] or P2] to navigate to Settings and press [OK] to select.
- 4. Press P1 or P2 to navigate to Encryption and press or to select.
- 5. The display shows Encryption and Turn On. Press or to enable encryption. The display shows Encryption On. If the Encryption was already on the display shows Encryption and Turn Off. Press or to disable encryption. The display shows Encryption Off.

If the radio has encryption assigned to a channel, the Home screen of the radio shows the secure or insecure icon.

Note: This feature is available only in digital mode.

Dual Tone Multi Frequency (DTMF)

The Dual Tone Multi Frequency (DTMF) feature allows the radio to operate in a radio system with an interface to telephone or other DTMF based systems. DTMF Codes can be programmed into the radio by your RCA Communications Systems dealer. DTMF receive/transmit feature has four optional modes with 32 encode groups with up to 30 characters per group.

To use this feature, your radio must have an access code, which is system dependent. Please contact with your RCA Communications Systems dealer or system administrator for more information.

Radio Disable / Enable

The Radio Enable/Disable feature allows you to enable or disable any radio within your system. For example, you may want to disable a stolen radio, to prevent the thief from using it, then enable that radio once it is recovered.

Note: The Radio Disable/Enable feature requires the radio in your system to have this function enabled. You can only Enable/Disable a radio that is within communication range. Check with your RCA Communications Systems Dealer or system administrator for more information.

Radio Disable

Radio Enable can be initiated through the Menu of your radio.

- 1. Press [MENU] to access the menu.
- 2. Press [P] or P] to navigate to Contacts and press [ok] to select.
- 3. Press [Pt] or Pt] to navigate to the desired subscriber alias or ID and press ok to select. You can also press [Pt] or Pt] to navigate to Manual Dial and press ok twice, input subscriber ID and press ok to select.

Note: Keypad speaker mic is required, sold separately. Please contact your RCA Communications Systems dealer for more info.

- 4. Press [*] or *] to navigate to Radio Disable and press (or to select.
- If successful, a tone sounds and the display shows Radio Disable Successful!. If failed, a tone sounds and the display shows Radio Disable Failed.

Note: Do not press the [BACK] button to return to the previous Menu until the operation is complete.

Radio Enable

Radio Enable can be initiated through the Menu of your radio.

- 1. Press [MENU] to access the menu.
- 2. Press [P1 or P2] to navigate to Contacts and press [OK] to select.
- 3. Press [Pt] or [Pt] to navigate to the desired subscriber alias or ID and press [ok] to select. You can also press [Pt] or [Pt] to navigate to Manual Dial and press [ok] twice, input subscriber ID and press [ok] to select.

Note: Keypad speaker mic is required, sold separately. Please contact your RCA Communications Systems dealer for more info.

- 4. Press [P1] or P2] to navigate to Radio Active and press [ok] to select.
- If successful, a tone sounds and the display shows Radio Active Successful!. If failed, a tone sounds and the display shows Radio Active Failed.

Note: Do not press the [ack] button to return to the previous Menu until the operation is complete.

Scan

Scan lists are created and assigned to individual channels/groups. The radio scans for voice activity by cycling through the channel/group sequence specified in the scan list for the current channel/group. Your radio can support up to 250 scan lists, with a maximum of 16 members in a list. Each scan list supports a mixture of both analog and digital entries. You can add, delete, or prioritize channels by editing the scan lists.

Viewing an Entry in the Scan List

- Use the Channel Selector Knob to select a channel programmed with a scan list.
- 2. Press [MENU] to access the menu.
- 3. Press [P1] or [P2] to navigate to Scan and press [ox] to select.
- 4. Press [Pf] or P2 to navigate to View List and press [ok] to select.
- 5. Use $\begin{bmatrix} P_1 \\ C \end{bmatrix}$ or $\begin{bmatrix} P_2 \\ C \end{bmatrix}$ to view the members on the scan list.

Note: If set as priority, the Priority icon appears left of the member's alias, indicate whether the member is on a Priority 1 or Priority 2 channel list. You cannot have multiple Priority 1 or Priority 2 channels in a scan list. There is no Priority icon if priority is set to None.

Scan Instructions and Methods

When a scan is initiated, your radio cycles through the programmed scan list for the current channel looking for voice activity. The LED blinks red and you see the Scan icon on the display.

There are two ways of initiating scan:

- Manual Scan: Initiate scan manually using the programmed by your RCA Communications Systems dealer Scan ON/OFF side button or menu function. When scan is initiated, radio will detect all channels / groups on the programmed scan list.
- Auto Scan: Your radio automatically starts scanning when you select a channel / group that has Auto Scan enabled.

Starting and Stopping Scan

Press the programmed Scan side button to start or stop the Scan feature or follow the procedure below:

- Use the Channel Selector Knob to select a channel programmed with a scan list.
- 2. Press [MENU] to access the menu.
- 3. Press [P] or P2 to navigate to Scan and press [ok] to select.
- 4. The display shows Turn Off if scan is disabled or the display shows Turn on if scan is enabled.
- 5. Press [ox] to select.
- The LED blinks red and the Scan icon is displayed when Scan is enabled. The LED turns off and the Scan icon disappears when Scan is disabled.

Responding to a Scan

During scanning, your radio stops on any channel / group where activity is detected. After the transmission is over the radio remains on the active channel for a programmed time period known as "hang time".

- Press the PTT button during hang time to respond to the call. The LED lights up red.
- 2. Release PTT button to listen.

Note: If you do not respond within the hang time period, the radio continues scanning other channels / groups.

Deleting a Nuisance Channel

If a channel continually generates unwanted calls or noise (termed a "nuisance" channel), you can temporarily remove the unwanted channel from the scan list.

Note: This capability does not apply to the channel designated as the Selected Channel. This feature is not accessible through the menu.

- When your radio stops on an unwanted or nuisance channel, press the programmed Nuisance Channel Delete button until you hear a tone.
- Release the Nuisance Channel Delete button. The nuisance channel is deleted.

Restoring a Nuisance Channel

To restore the deleted nuisance channel, power the radio off and back on again or press Stop and Start to restart a scan via the programmed Scan button.

Utilities

Turning Keypad Tones On or Off

You can enable and disable keypad tones if needed.

- 1. Press [MENU] to access the menu.
- 2. Press [P1 or P2] to navigate to Utilities and press [OK] to select.
- 3. Press [or radio Settings and press or to select.
- 4. Press [P¹] or P²] to navigate to Tone/Alerts and press [oκ] to select.
- 5. Press [or [] to navigate to Keypad Tones and press or to select.
- 6. If the display shows Turn On, Press [ox] to enable the keypad tones. If the display shows Turn Off press [ox] to disable the keypad tones.

Setting the Squelch Level

You can adjust your radio's squelch level to filter out unwanted calls with low signal strength or channels that have a higher than normal background noise.

Settings: Normal is the default level. Tight may help to filter out (unwanted) calls and / or background noise. However, calls from radio within your system that are in very remote locations may also be filtered out.

Press the programmed Squelch button to toggle squelch level between normal and tight or follow the procedure below to adjust the Squelch Level through the Menu.

- 1. Press [MENU] to access the menu.
- 2. Press [Pt] or Pt] to navigate to Utilities and press [ok] to select.
- 3. Press [or radio Settings and press or to select.
- 4. Press [P1] or P2] to navigate to Squelch and press [OK] to select.
- 5. Choose either Tight or Normal and press [or] button, screen returns to the previous menu.

Setting the Power Level

You can customize your radio's power setting to high or low for each channel.

Settings: High enables communication with radios located at a considerable distance from you. Low enables communication with radios in closer proximity.

Press the programmed Power Level button to toggle transmits power level between high and low or follow the procedure below to adjust the Power Level through the Menu.

- 1. Press [MENU] to access the menu.
- 2. Press [P1] or [P2] to navigate to Utilities and press [OK] to select.
- 3. Press [or] to navigate to Radio Settings and press [or] to select.
- 4. Press P or P to navigate to Power and press button.
- 5. Change your current setting as prompted on the display and press or local to select new power level.

Press the [sac] button to return to the Home screen. The display shows the Power Level icon.

Controlling the Display Backlight

You can change the radio's display backlight setting according to your needs. The setting also affects the Menu navigation buttons and keypad backlighting accordingly.

- 1. Press [MENU] to access the menu.
- 2. Press [P1 or P2] to navigate to Utilities and press [ok] to select.
- 3. Press [P] or P] to navigate to Radio Settings and press or to select.
- 4. Press Paragraph or Paragraph to navigate to Backlight and press of button.
- 5. You have following options to choose from:
 - · Always
 - 5S
 - 10S
 - 15STurn Off

Select the desired setting and press the ok button.

Note: The display backlight and keypad backlight are automatically turned off if the LED indicator is disabled.

Talkaround

This feature toggles between repeater and talkaround (direct) mode. If you are using a repeater and your repeater is not operating or you are out of it's range, you can continue to communicate during that time directly with other radios within your group. This is called "talkaround". Press the programmed Repeater / Talkaround button to toggle between talkaround and repeater modes or follow the instructions below to use Menu of your radio.

- 1. Press [MENU] to access the menu.
- 2. Press [P] or P] to navigate to Utilities and press [ox] to select.
- 3. Press [P] or [P] to navigate to Radio Settings and press or to select.
- 4. Press [P1 or P2] to navigate to Talkaround and press [ok] to select.
- 5. If the radio is currently in Repeater Mode display shows "Turn On". If the radio is in Talkaround Mode the display shows Turn Off.
- 6. Press or to select. The display shows Talkaround On or Talkaround Off
- 7. The screen automatically returns to the previous menu.
- 8. Press [P1] or P2] to navigate to Utilities and press [OK] to select.

Turning the Radio Tones/Alert On or Off

You can enable and disable all radio tones and alerts (except for the incoming Emergency alert tone) if needed.

- 1. Press [MENU] to access the menu.
- 2. Press [P] or P] to navigate to Utilities and press [ox] to select.
- 3. Press $[\![\stackrel{\text{P1}}{\leftarrow}\!]$ or $[\![\stackrel{\text{P2}}{\rightarrow}\!]\!]$ to navigate to Radio Settings and press $[\![]$ to select.
- 4. Press [P1] or P2] to navigate to All Tones/Alerts and press [ok] to select.
- 5. Press [Pf] or P2] to navigate to All Tones and press [ok] to select.
- 6. If the display shows Turn On press on the display shows All Tones On. If the display shows Turn Off press of to disable all tones and alerts and the display shows All Tones Off.

Turning the LED Indicator On or Off

You can enable and disable the LED Indicator if needed.

- 1. Press [MENU] to access the menu.
- 2. Press Property or rate to navigate to Utilities and press to select.
- 3. Press [*] or [*] to navigate to Radio Settings and press [ox] to select.
- 4. Press [P¹] or P²] to navigate to LED Indicator and press [oκ] button.
- 5. If the display shows Turn On. Press [ok] to enable the LED Indicator and the display shows All LEDs On. If the display shows Turn Off press [ok] to disable the LED Indicator and the display shows All LEDs Off.

Note: The display backlight, buttons and keypad backlight are automatically turned off if the LED indicator is disabled.

Turning the Introduction Screen On or Off

You can enable and disable the Introduction Screen if needed.

- 1. Press [MENU] to access the menu.
- 2. Press [P] or P2 to navigate to Utilities and press [ok] to select.
- 3. Press [or] to navigate to Radio Settings and press [or] to select.
- 4. Press [P1] or P2] to navigate to Intro Screen and press [ok] to select.
- 5. If The display shows Turn On press to enable the Introduction Screen and the display shows Intro Screen On. If the display shows Turn Off press of to disable the Introduction Screen and the display shows Intro Screen Off.

Accessing General Radio Information

Your radio contains information on the following:

- Radio ID
- CPS Version
- Firmware Version
- · Hardware Version

Note: Press [BACK] at any time to return to the previous screen.

Checking the Radio ID

- 1. Press [MENU] to access the menu.
- 2. Press [P1 or P2] to navigate to Utilities and press [OK] to select.
- 3. Press [P1 or P2] to navigate to Radio Info and press [ox] to select.
- 4. Press [Pt] or Pt] to navigate to My Number and press [ok] button.
- 5. The display shows radio ID and alias.

Checking the Firmware Version

Display the firmware version on your radio.

- 1. Press [MENU] to access the menu.
- 2. Press [P] or P] to navigate to Utilities and press [ox] to select.
- 3. Press [Pt or P2] to navigate to Radio Info and press [ok] to select.
- 4. Press P or P to navigate to Firmware Ver. and press or button.
- 5. The display shows the current Firmware version.

Checking the CPS Version

Display the CPS version on your radio.

- 1. Press [MENU] to access the menu.
- 2. Press [P] or P2 to navigate to Utilities and press [OK] to select.
- 3. Press [P1] or P2] to navigate to Radio Info and press [ox] to select.
- 4. Press [P1] or P2] to navigate to CPS Ver. and press [ok] button.
- 5. The display shows the current CPS version.

Checking the Hardware Version

Display the Hardware version on your radio.

- 1. Press [MENU] to access the menu.
- 2. Press [P1] or [P2] to navigate to Utilities and press [ox] to select.
- 3. Press [P1] or P2] to navigate to Radio Info and press [OK] to select.
- 4. Press [P1] or P2] to navigate to Hardware Ver. and press [ox] button.
- 5. The display shows the current Hardware version.

CARE AND CLEANING

- · Do not directly handle the radio by its antenna or external microphone.
- Do not place the radio in a dusty or dirty environment.
- Clean the radio with a lint-free cloth moistened with clean water and/or a mild dishwashing liquid to remove dirt, grease and dust.
- Avoid subjecting the radio to corrosives, solvent or spirits.



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TROUBLESHOOTING

Symptom	Solution
Cannot talk to or hear transmissions from your group members	a. Make sure that your radio operates on the same channel and / or has the same CTCSS/CDCSS settings as your group members. b. Make sure you are within their communication range.
Radio is on, but you cannot hear voice transmissions or they are not very loud	a. Turn the volume control knob to its maximum volume. b. Return the radio to your dealer to check for microphone damage.

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.

Operational Instructions and Training Guidelines

To ensure optimal performance and compliance with the occupational/controlled environment RF energy exposure limits in the above standards and guidelines, users should transmit not more than 50% of the time and always adhere to the following procedures:

- Antenna gain must not exceed 1.8dBi.
- The antenna must be installed complying with the requirements of manufacturer or supplier, and it must be at least 20cm away from human body.
- Do not remove the RF Exposure Label from the device.
- User awareness instructions should accompany device when transferred to other users.
- Do not use this device if the operational requirements described herein are not met.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an occupational/controlled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with minimum distance 20cm between the radiator your body.

ISEDC RSS warning

This product meets the applicable Industry Canada technical specifications.

Le présent matériel est conforme aux specifications techniques applicables d'Industrie Canada.

The device is compliance with RF exposure guidelines, users can obtain Canadian information on RF exposure and compliance. The minimum distance from body to use the device is 20cm.

Le présent appareil est conforme Après examen de ce matériel aux conformité ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur l'exposition aux radiofréquences et la conformité and compliance d'acquérir les informations correspondantes. La distance minimale du corps à utiliser le dispositif est de 20cm.