

SCAN

Your radio is equipped with the Scan feature, which allows you to search for, lock onto, and monitor voice activity on trunked talkgroups and conventional channels.

There are five types of Scan available in your radio:

- Auto Group Scan
- All Group Scan
- PassPort Primary Auto Scan
- PassPort Group Scan
- System Scan

The table below summarizes the Scan types available in each zone type.

Zone	PassPort Primary Auto Scan	Pass-Port Group Scan	LTR Auto Group Scan	LTR All Group Scan	System Scan
PassPort Trunked	X	X			
LTR Trunked			X	X	X

Zone	PassPort Primary Auto Scan	Pass-Port Group Scan	LTR Auto Group Scan	LTR All Group Scan	System Scan
Conventional					X

Shaded areas indicate that Scan can be enabled through a programmable button (see page 20) or through your radio menu.

TALKBACK

When activity is detected during any type of scan, scanning stops and the active talkgroup or channel appears and remains on the display until scanning resumes. Your dealer can program the amount of time you can respond (or "TALKBACK") to the caller before your radio resumes scanning.

You must press the **PTT** button to participate in the call; otherwise, scanning continues to the other talkgroups or channels.

PASSPORT PRIMARY AUTO GROUP SCAN

(PASSPORT TRUNKED OPERATION ONLY)

PassPort Primary Auto Group Scan automatically scans the primary (first) talkgroup within the selected PassPort zone. Any time you are positioned on a PassPort talkgroup other than the first one, your radio automatically scans activity on the first talkgroup within that zone.

Note: This feature is enabled AUTOMATICALLY with your radio. It is not enabled through the radio menu or through a preprogrammed scan button.

PASSPORT GROUP SCAN

(PASSPORT TRUNKED OPERATION ONLY)

PassPort Group Scan scans talkgroups within the selected PassPort trunked zone, as programmed by your dealer. Up to 16 different talkgroups can be programmed into each Scan list, with one Scan list assigned to each position on the **Zone Selector**. You can edit these Scan lists through your radio's menu (see page 66).

When PassPort Group Scan is Enabled

- The  symbol appears on the display.
- The LED indicator blinks green during PassPort Group Scan operation; it stops blinking when the radio switches to an active talkgroup or channel.

Note:

- PassPort Group Scan is not available when registered on a non-home site.
- If you switch to another PassPort zone, LTR, or conventional zone while the radio is scanning, scanning resumes upon return to the PassPort zone where PassPort Group Scan was enabled.
- If the radio is turned off while scanning, the radio resumes scanning when you turn it back on. If the radio registers on a non-home site, scanning is not enabled until the radio registers at its home site.

To Start or Stop PassPort Group Scan Operation through a Preprogrammed Button (see page 20)

- Press the preprogrammed **Scan** button to start PassPort Group Scan.
- Press the preprogrammed **Scan** button again to stop the PassPort Group Scan.

—or—

To Start or Stop PassPort Group Scan Operation through the Menu

1  to enter menu mode.

2  or  until **Pass Grp Scan**

3  to select **Pass Grp Scan**

You see the current scan status.

4  or  until **PpGp Scan Off?**

—or—

PpGp Scan On?

5  to confirm your selection.

AUTO GROUP SCAN (LTR TRUNKED OPERATION ONLY)

Auto Group Scan automatically scans talkgroups within an LTR zone as programmed by your dealer. Auto Group Scan can be either non-prioritized or prioritized.

- Non-prioritized Auto Group Scan automatically scans all talkgroups programmed with Auto Group Scan.
- Prioritized Auto Group Scan automatically scans the selected talkgroup and all lower 4-numbered talkgroups. For example, if talkgroups 1, 3, and 4 have been programmed by your dealer with Auto Group Scan and talkgroup 4 is selected, the radio automatically scans talkgroups 1, 3, and 4, and skips talkgroup 2.

To Start Auto Group Scan

Select a talkgroup that has been programmed for Auto Group Scan by your dealer.

Note: You do not need to press a preprogrammed **Scan** button.

- The  symbol appears on the display when non-prioritized Auto Group Scan has been activated.
- The  symbol appears on the display when prioritized Auto Group Scan has been activated.
- There is no LED indicator during Auto Group Scan.

To Stop Auto Group Scan

Select a talkgroup that has not been programmed for Auto Group Scan by your dealer.

ALL GROUP SCAN (LTR TRUNKED OPERATION ONLY)

All Group Scan scans all talkgroups within the selected LTR trunked zone.

When All Group Scan is enabled:

- The  symbol appears on the display.
- The LED indicator blinks green during All Group Scan operation; it stops blinking when the radio switches to an active talkgroup.

Note: If you enter menu mode while the radio is scanning, scanning stops. It resumes when you exit menu mode.

To Start or Stop All Group Scan Operation through a Preprogrammed Button (see page 20)

- Press the preprogrammed All Group Scan button once to start All Group Scan.
- Press the preprogrammed All Group Scan button again to stop All Group Scan.

—or—

To Start or Stop All Group Scan Operation Through the Menu

1  to enter menu mode.

2  or  until **All Group Scan**

3  to select **All Group Scan**

You see the current scan status.

4  or  until **All Group On?**

—or—

All Group Off?

5  to confirm your selection.

SYSTEM SCAN

(LTR TRUNKED AND CONVENTIONAL OPERATION ONLY)

System Scan scans trunked talkgroups and conventional channels between LTR and conventional zones, as programmed by your dealer. Up to 16 different talkgroups or conventional channels can be programmed into each Scan list. You can edit these lists through your radio's menu (see page 66).

When System Scan is Enabled

- The  symbol appears on the display.
- The LED indicator blinks green during System Scan operation; it stops blinking when the radio switches to an active talkgroup or channel.

Note: If you enter menu mode while the radio is scanning, scanning stops. It resumes when you exit menu mode.

To Start or Stop a System Scan Operation

Press the preprogrammed **Scan** button (see page 20) to start or stop scanning,

—or—

Do the following:

1  to enter menu mode.

2  or  until **System Scan**

3  to select **System Scan**

You see the current scan status.

4  or  until **Sys Scan On?**

—or— **Sys Scan Off?**

5  to confirm your selection.

Note: In conventional zones only, if there is activity on a non-priority channel, the radio disconnects the user from the current conversation and automatically switches to an active priority channel. This is indicated with a short alert tone.

DELETING A NUISANCE CHANNEL/ TALKGROUP

(PASSPORT GROUP SCAN OR SYSTEM SCAN OPERATION ONLY)

If a talkgroup or channel continually generates unwanted calls (a “nuisance” channel), use the preprogrammed **Scan** button to temporarily delete the talkgroup or channel from the Scan list.

To Temporarily Delete the Channel/ Talkgroup

- 1 While the radio’s receiving activity is on the nuisance channel, press and hold the **Scan** button until you hear a high-pitched tone (valid key press).
- 2 Release the **Scan** button. The nuisance channel has been temporarily deleted from your Scan list.

Note: In PassPort mode, you cannot delete a priority channel/talkgroup (see page 68), or the currently selected talkgroup in a Scan list.

Restoring a Channel/Talkgroup Back to the Scan List

To restore a previously deleted talkgroup or channel back to the Scan list, restart the scan operation or turn your radio off and on again.

Note: In PassPort mode, the talkgroup can also be restored by scrolling through the list, or switching the current selected talkgroup or zone

EDITING A SCAN LIST

(PASSPORT GROUP SCAN OR SYSTEM SCAN OPERATION ONLY)

One Scan list is assigned to each of the 16 positions on the **Zone Selector**. Each Scan list can contain up to 16 talkgroups and/or channels. The same talkgroup or channel can be included in several Scan lists, and the same Scan list can be assigned to several **Zone Selector** positions.

When you edit a Scan list, you can either add, delete, or prioritize talkgroups or channels.

Note: In PassPort mode, talkgroups cannot be prioritized.

Your radio cannot receive any calls while you are editing a Scan list. The  symbol is displayed while you are in edit mode.

Note: In Conventional operation only, even if there is activity on a non-priority channel, your radio automatically switches to an active priority channel and indicates the activity with a short tone.

ADDING OR DELETING TALKGROUPS OR CHANNELS IN A SCAN LIST

1  to enter menu mode.

2  or  until **Program Lists**

3  to select **Program Lists**

4  or  until **Scan List**

Note: One Scan list per mode of operation is available.

5  to select **Scan List**

6  or  until **Add Entry?**

or until **Delete Entry?**

7  to confirm your selection.

8  or  until you see the talkgroup or channel you want to add or delete.

Note: You cannot delete the Primary talkgroup or your selected talkgroup off a Scan List in PassPort mode.

9  to confirm your selection.

10 If you added a talkgroup or channel,

you see: **Entry Saved**
—or—

If you delete a talkgroup or channel,

you see: **Delete?**

 to confirm the deletion,

you see:

Entry Deleted

11  to return to

Add Entry?

to return to
—or—

Delete Entry?

Hold down  to exit menu mode.

PRIORITIZING A TALKGROUP OR CHANNEL IN A SCAN LIST (SYSTEM SCAN OPERATION ONLY)

You may want to check the activity on one or two talkgroups or channels more frequently than others. You can do this by prioritizing them:

Priority Channel	Scanning Sequence
None specified	Ch1→Ch2→Ch3→ Ch4→...Ch1
Channel 2 (Priority 1)	Ch2→Ch1→Ch2→Ch3→ Ch2→Ch4→Ch2→...Ch1

Priority Channel	Scanning Sequence
Channel 2 (Priority 1) and Channel 8 (Priority 2)	Ch2→Ch1→Ch8→Ch3→ Ch2→Ch4→Ch8→...Ch1

Note: In Conventional operation only, even if there is activity on a non-priority channel, your radio automatically switches to an active priority channel and indicates the activity with a short tone.

Setting Priority Talkgroups or Channels

- 1  to enter menu mode.
- 2  or  until **Program Lists**
- 3  to select **Program Lists**
- 4  or  until **Scan List**
- 5  to select **Scan List**
- 6  or  until **Edit Priority?**
- 7  to select **Edit Priority?**
- 8  or  until **Priority #1?**
or until **Priority #2?**

You see the current priority talkgroup or channel.

- 9  to select the desired priority level.
- 10  or  until you see the talkgroup or channel you want to prioritize.

- 11  to prioritize that talkgroup or channel.

- 12  to return to **Edit Priority?**
—or—

Hold down  to exit menu mode.

Note: You cannot reprioritize a priority 1 talkgroup or channel to priority 2.

Notes

PHONE

Your radio allows you to place and receive telephone calls through trunked and conventional systems (depending on phone line availability). Telephone calls through a repeater allow only one person to speak at a time.

MAKING A PHONE CALL ① THROUGH A TRUNKED SYSTEM

Note: The following instructions assume your radio has been programmed as follows by your dealer using CPS (Customer Programming Software).

- Dial type: Live
- Access/Deaccess type: Immediate Auto
- Tone Span: Timed - 100 ms tone duration

To Initiate a Phone Call

Do the following:

- 1 Select a trunked zone and talkgroup that have been programmed for telephone.

- 2  to enter menu mode.

—or—

Press the preprogrammed radio or DTMF microphone **Phone** button, and skip to step 5.

—or—

- a. Press and release the **Speed Dial** button to use the speed dial feature.
- b. Press the (1 to 9) key corresponding to the number you want to call on the Phone list. Or press 0 if you want to call the last number dialed.
- c. Press the **PTT** button. A dial tone sounds.
- d. Press the **PTT** button again to send the phone number.

—or—

For LTR trunked systems, press and hold the **PTT** button while dialing a number.

- 3  or  until

Phone

- 4  to confirm

Phone

① appears on the display when you are in Phone mode.

5 Press and Release the **PTT** button.

- If phone access is successful, a dial tone sounds.
- If phone access is unsuccessful, a low-pitched alternating tone sounds. Disconnect the call (see step 8) and try again.

6 Enter the phone number with the DTMF microphone. The number is automatically sent without pressing the **PTT** button again.

—or—

 or  to select a number from the phone list.

xxx-xxx-xxxx

Press and release the **PTT** button again to send the number.

7 Hold the radio in a vertical position with the microphone 1 to 2 inches (2.5 to 5 cm) away from your mouth. Press the **PTT** button to talk; release it to listen.

8 To disconnect the phone call: Press and hold  to exit Phone.  no longer appears on the display.

MAKING A PHONE CALL THROUGH A CONVENTIONAL SYSTEM

To Initiate a Phone Call

Press the preprogrammed **Phone** button, and skip to step 5.

—or—

Press the **PTT** button, and if the Hot keypad feature has been programmed by your dealer, do the following:

- 1** Select a conventional zone and channel that have been programmed for telephone.

2  to enter menu mode.

3  or  until Phone

4  to select Phone

 appears on the display when you are in Phone Mode.

5 (For conventional operation with auto access only). You hear a series of tones, indicating that an access code is being sent automatically, and see your access code:

—or—

Enter your access code using the DTMF microphone keypad.

6 When you hear a dial tone:

Enter the phone number using the DTMF microphone keypad.

xxx-xxx-xxxx

—or—

 or  to select a number from the phone list.

—or— (see step 7)

xxx-xxx-xxxx

- 7
- Press and release the preprogrammed **Speed Dial** button (see step 6) to use the Speed Dial feature.
 - Press the key (1 to 9) corresponding to the number you want to call, or press 0 if you want to call the last number dialed.

Note: To redial the last number dialed (if not using Speed Dial), press and release the **PTT** button immediately after the access code is sent. The radio sends the last number dialed.

—or—

If you entered your access code using the keypad, press  once to access the last number dialed; then press and release the **PTT** button.

- 8 Press and release the **PTT** button, if required for your radio.
- 9 Hold the radio in a vertical position with the microphone 1 to 2 inches (2.5 to 5 cm) away from your mouth. Press the **PTT** button to talk; release it to listen.
- 10 To disconnect a phone call, do one of the following:
 Enter the deaccess code using the DTMF microphone keypad.
 –or–
 If your radio has the deaccess code programmed, go to step 9.
- 11 To exit Phone Mode:
 Press and hold  to disconnect the call.  disappears from the display.

RECEIVING A PHONE CALL

THROUGH A TRUNKED OR CONVENTIONAL SYSTEM

To Receive a Phone Call

- 1  or  to select a LTR talkgroup or conventional channel that has been programmed for telephone.

–or–

Activate any scan type containing a telephone talkgroup or channel (see page 59).

Note: No PassPort talkgroup or zone selection is needed in PassPort mode.

- When a phone call is received, a ringing tone sounds, alerting you to answer the phone call.

Note: The  also appears on the display in PassPort mode.

- 2 Press the **PTT** button to answer the phone call. Press the **PTT** button to talk; release it to listen.

- 3 To disconnect the phone call and exit Phone and menu mode:

Press and hold to disconnect the call.

Note: ① no longer appears on the display in PassPort mode.

MODIFYING THE PHONE LIST

Your radio contains a Phone list that holds up to 25 phone numbers. The Phone list is shared between trunked and conventional Phone operation. You can modify the Phone list in three ways through your radio's menu:

- Add an entry
- Delete an entry
- Edit an existing entry

The  symbol appears on the display when you are modifying the phone list.

To Add an Entry

- 1  to enter menu mode.
- 2  or  until **Program Lists**
- 3  to select **Program Lists**
- 4  or  until **Phone List**
- 5  to select **Phone List**
- 6  or  until **Add Entry?**
- 7  to select, **Add Entry?**
you see: **Entry Name**
- 8 Use the DTMF microphone keypad to enter the name (see page 23 and page 24).
- 9  to store the name,
you see: **Enter Phone #**

10 Use the DTMF microphone keypad to enter the phone number. You can also add a dash (press ) and a Pause Indicator (hold down ) until the # character on the display changes to a "P".

11  to store the phone number.

12  or  until you see the location in the list where you want to store the phone number.

13  to store the phone number,

you see:

Entry Saved

14  to return to

Add Entry?

Hold down  to exit menu mode.

To Delete an Entry

1  to enter menu mode.

2  or  until

Program Lists

3  to select

Program Lists

4  or  until

Phone List

5  to select

Phone List

6  or  until

Delete Entry?

7  to select

Delete Entry?

8  or  until you see the entry you want to delete.

9  to select the entry,

you see:

Delete?

10  again to confirm the deletion,

you see:

Entry Deleted

11  to return to
—or—

Delete Entry?

Hold down  to exit menu mode.

To Edit an Entry

- 1  to enter menu mode.
- 2  or  until **Program Lists**
- 3  to select **Program Lists**
- 4  or  until **Phone List**
- 5  to select **Phone List**
- 6  or  until **Edit Entry?**
- 7  to select **Edit Entry?**
- 8  or  until you see the entry you want to edit.
- 9  to select the entry.

- 10  or  until

Edit Name?

(to edit the name),

or until

Edit Number?

(to edit the phone number),

or until

Edit Location?

(to edit the location in the phone list).

- 11  to confirm your selection.

- 12 Use the DTMF microphone keypad to edit the entry (see page 19),

—or—

 or  until you see the location where you want to store the phone number.

- 13  to store the information.

- 14  to return to

Edit Entry?

—or—

Hold down  to exit menu mode.

Notes

VOICE STORAGE

The CDM1550•LS⁺ radio's voice storage feature enables your radio to perform seven types of voice related functions:

- Incoming Call Recording
- Voice Memo Recording
- Recorded Message Playback
- Recorded Message Delete
- Recorded Message Transmission
- Automatic Message Reply ("When Available")
- Message Time Stamping

There is a total of 120 seconds recording time available for all voice storage activity. Your dealer can divide the 120 seconds into a defined number of equal length time slots. The following table summarizes the slot length options available with the CDM1550•LS⁺ radio:

Number of Equal Length Slots	Slot Length (Seconds)
1	120
2	60
5	24
10	12
20	6

When recording calls, keep in mind these time slot guidelines:

- As a time slot becomes close to full, you see a timer count down the final 5 seconds.

When a time slot is completely full, an alert tone sounds

The display shows:
Recording Stops.

Msg Slot Full

- When all message slots have at least one message stored, an alert tone sounds.

If a voice storage record function is requested, the display shows:

Memory Full

INCOMING CALL RECORDING

The CDM1550•LS⁺ radio allows you to record incoming calls in either of two ways:

- Selective Incoming Call Recording
- All Incoming Call Recording

Note: Only the audio transmissions of your caller is recorded.

Selective Incoming Call Recording

This feature enables you to record incoming calls selectively, or on a call-by-call basis.

To Selectively Record an Incoming Call

- 1 Press and hold the preprogrammed **Record/Playback** button (see page 26) while receiving the call.

The display shows

Recording

A confirmation tone sounds, indicating that the radio begins recording.

- 2 The radio records the call until the message slot is full or until you release the preprogrammed **Record/Playback** button.
- 3 Release the **Record/Playback** button to stop recording.

All Incoming Call Recording

This feature enables you to automatically record all incoming trunked and conventional dispatch calls, trunked and conventional telephone interconnect calls, and MDC selective calls.

This feature is useful when you need to keep informed of channel activity while away from your radio.

Note: This feature does not work while in scan mode.

To Record All Incoming Calls

- 1  to enter menu mode.
- 2  or  until **Voice Storage**
- 3  to select **Voice Storage**
- 4  or  until **Record**
- 5  to select **Record**
- 6  or  until **All Incoming**
- 7  to select **All Incoming**
- 8 The display continuously flashes, except while a call is being recorded.

- 9 The display shows while your radio is recording.

Recording

The radio also records the time stamp and the channel alias to the message slot.

- 10 Press  to stop recording.

–or–

Go to step 1 again to continue recording in the next available slot.

Note: Five seconds before the message

slot ends, the radio display shows

(where XX = remaining seconds).

The “voice storage full” alert sounds when the message slot is full, and recording stops.

The display shows:

Msg Slot Full

VOICE MEMO RECORDING

In addition to recording calls received, the CDM1550•LS⁺ radio offers you the ability to record voice memos (or personal reminders) into the radio. The voice memo recording feature is useful for quickly saving phone numbers, names, or any other brief voice information. You can record voice memos using the preprogrammed **Record/Playback** button (see page 26) or your radio's menu.

Important Note:

To record properly, incoming calls cannot be received while a voice memo is being recorded.

To Record a Voice Memo using the Preprogrammed Record/Playback Button

- 1 Press and hold the preprogrammed **Record/Playback** button.
 - The display shows:

Recording

- A confirmation tone sounds, indicating that the radio begins recording.

- 2 Without pressing the **PTT** button, speak clearly into the microphone to record your memo. The radio records your memo until the message slot is full or until you release the preprogrammed **Record/Playback** button.

- 3 Release the **Record/Playback** button to stop recording.

To Record a Voice Memo using the Menu

- 1  to enter menu mode.

- 2  or  until **Voice Storage**

- 3  to select **Voice Storage**

- 4  or  until **Record**

- 5  to select **Record**

- 6  or  until **Voice Memo**

- 7  to select **Recording**

- 8 Without pressing the **PTT** button, speak clearly into the microphone to record your memo. The radio records your memo until the message slot is full or until you press .

Note: To stop recording at any time, press .

- 9 Press  to stop recording.

—or—

Repeat steps 7 and 8 to store additional messages.

RECORDED MESSAGE PLAYBACK

The CDM1550•LS⁺ allows you to list, select, and Playback previously recorded incoming call or voice memo messages. You can play back a message by using the preprogrammed **Record/Playback** button (see page 26) or your radio's menu.

Note: Recorded message **Playback** cannot be initiated while your radio is receiving. Also, you don't receive any incoming calls while you play back messages.

Playing Msg XXX

To Playback a Message using the Preprogrammed Record/Playback Button

- 1 Press and release the preprogrammed **Record/Playback** button.

- The first message plays, and the display shows (XXX = the message number)

Playing Msg XXX

- 2 To advance to the next message at any time during Play back, press and release the **Record/Playback** button again.

- 3 To exit/cancel Playback mode:

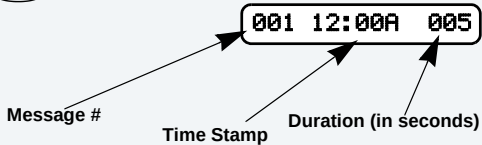
Press and release the preprogrammed **Playback Exit** button (see page 26).

—or—

Press  to stop Play Back.

To Playback a Message using the Menu

- 1  to enter menu mode.
- 2  or  until **Voice Storage**
- 3  to select **Voice Storage**
- 4  or  until **Playback**
- 5  to select **Playback**
- 6  or  until **001 12:00A 005**
- 7  to select


- 8  or  to select the desired message.
- 9 Press  to play the selected message.
- 10  or  anytime during playback to advance to the next message.

RECORDED MESSAGE DELETE

The CDM1550•LS⁺ radio allows you to delete previously recorded incoming call or voice memo messages. You can delete a message using either the preprogrammed **Delete Playback** button (see page 26) or your radio's menu.

Note: Messages must be deleted one at a time.

To Delete a Message using the Preprogrammed Delete Playback Button (see page 26)

- 1 Press and release the preprogrammed **Record/Playback** button.
- 2  or  to select the desired message.
- 3 Press and hold the preprogrammed **Delete Playback** button to delete current message.
- 4  to stop deleting messages.

To Delete a Message using the Menu

- 1  to enter menu mode.
- 2  or  until **Voice Storage**
- 3  to select **Voice Storage**
- 4  or  until **Delete**
- 5  to select **Delete**
- 6  or  to select the desired message.
- 7 Press  to delete the selected message.
- 8  or  to select the another message to be deleted, then go to step 7.
—or—
Press  to stop deleting messages.

RECORDED MESSAGE TRANSMISSION

This feature allows you to transmit a recorded message to another radio user.

To Transmit a Recorded Message

- 1 Press and hold the **PTT** button to initiate the message transmission.
- 2 While holding down the **PTT** button, press the preprogrammed **Record/Playback** button to select and play back the desired recorded call or memo.
- 3 When finished transmitting your message, press the **Record/Playback** button again to stop transmitting.

ANSWER MODE

The Answer Mode feature allows radio callers to leave recorded audio messages on your radio.

Note: This feature is available via the radio's menu and/or the radio or the DTMF microphone programmable button.

To Enable the Answer Mode Feature

- 1  to enter menu mode.
- 2  or  until Voice Storage
- 3  to select Voice Storage
- 4  or  until Ans Mode On?
- 5  to select Ans Mode On

To Record a Message

- 1  or  until Record Msg
- 2  to select Greeting Msg?

3  or  until Alternate Msg?

4  to select Greeting Msg?

The LCD shows Recording

5 Without pressing the **PTT** button, speak clearly into the microphone to record your memo. The radio records your greeting until the message slot is full or until you press .

6 To exit or cancel recording, press .

With this feature enabled, the recorded message is automatically transmitted whenever your radio receives a call.

To Disable the Answer Mode Feature

1  to enter menu mode.

2  or  until **Voice Storage**

3  to select **Voice Storage**

4  or  until **Ans Mode Off?**

5  to select **Ans Mode Off**

Notes

AUDIO/TONE SETTINGS

You can customize the audio and tone feature settings on your radio by:

- 1  to enter menu mode.
- 2  or  until 
- 3  to select 
- 4  or  until you see the feature you want to change (see the table on the next page).
- 5  to select the feature. You see the feature's current setting.
- 6  or  for available settings. (For Name and Call Tone Tagging, see page 56.)
- 7  to set the desired setting.

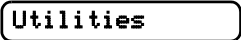
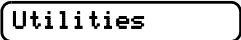
Audio/Tone Settings

Feature	What it Does	Settings
Alert Vol Lvl	Makes the volume level of the audio and alert tones independent. If turned on, it makes the alert tones follow the settings in the CPS; if turned off, the alert tones follow the setting of the volume knob.	Ind Alert Off Ind Alert On
Tone Disable	Turns all alert and audio tones on or off.	Tones On Tones Off
Name and Call Tone Tagging ‡	Assigns a specific ring tone when receiving a call from a specific user (see page 56 for details).	Standard Alert #1 – #7
Call Tone Tag ‡	Assigns a specific tone when receiving a specific type of radio call (see page 56 for details).	Standard Alert #1 – #7
Escalert ‡	Increases the volume of the alarm tones when a radio call is not answered.	Escalert On Escalert Off
Companding	Provides the same audio quality for 12.5kHz and for 25kHz channels.	Compand On Compand Off

‡ LTR trunking operation only.

UTILITIES

You can customize some of your radio's feature by:

- 1  to enter menu mode.
- 2  or  until 
- 3  to select 
- 4  or  until you see the feature you want to change (see table on the next page).
- 5  to select the feature. You see the feature's current setting.
- 6  or  for available settings.
- 7  to select the desired setting.

Utilities Features

Feature	What it Does	Settings
Power Level	Changes the power level of the radio to high, low (see page 93).	Power High Power Low
Clock	Sets the time, or turns the clock on or off (see page 94).	Clock On Clock Off Set Time
Reminder Alarm	Sets the alarm, or turns it on or off (see page 94).	Alarm On Alarm Off Set Time
Language Selection § ‡	Selects the language to be shown on your radio's displays.	English Spanish Portuguese French
Software Ver. #	In LTR trunked and conventional operation, displays the radio's software version number when you press . In PassPort operation, displays the PassPort software version number when you press . Note: The LTR and conventional software version number may be different than the PassPort software version number.	—

§ Conventional Operation only.

‡ LTR Trunked Operation only.

SETTING THE POWER LEVEL **L**/**H**

Each channel in your radio has a predefined transmit power level that can be changed.

- *High power* (**H**) allows you to reach a radio that is farther away.
- *Low power* (**L**) conserves the battery's charge.

Note:

- Be aware that a message received from a nearby radio might change your radio's power level to low. This may cause radios that are farther away not to receive your transmissions.
- In PassPort mode, the power level is predefined radio wide.

To set the power level:

Press the preprogrammed **Power Level** button (see page 25) to toggle between *low* and *high*,
–or–

Do the following:

1  to enter menu mode.

2  or  until

Utilities

3  to select

Utilities

4  or  until

Power Level

5  to select

Power Level

The display shows the current power level.

6  or  until

Power High?

or until

Power Low?

7  to confirm the selection.

SETTING THE CLOCK/ALARM

To Set the Clock/Alarm

1 to enter menu mode.

2 or until **Utilities**

3 to select **Set time?**

4 or until **Clock**

or until **Reminder Alarm**

5 to confirm your selection.

6 or until **Set time?**

7 to select **Set time?**

8 When a setting is blinking, you can change it with or .

Hour (AM or PM) → **3:05 PM**
Minutes → (AM/PM or 24 hr)

Note: You cannot select "24 hr" for

Reminder Alarm

9 or to move to the previous or next setting.

10 to save your changes.

11 to return to **Utilities**

—or— to return to **Reminder Alarm**

—or— **Clock**

—or—

Hold down to exit menu mode.

DISPLAYING THE TIME

To Display the Time

- 1  to enter menu mode.
- 2  or  until **Utilities**
- 3  to select **Utilities**
- 4  or  until **Clock**
- 5  to confirm your selection.
- 6  or  until **Display Clock?**
- 7  to select **Display Clock?**
The radio displays the time for a pre-programmed duration.
- 8  to exit the menu.

SELECTING THE DISPLAY LANGUAGE

(LTR TRUNKED AND CONVENTIONAL OPERATION ONLY)

To Select the Display Language

- 1  to enter menu mode.
- 2  or  until **Utilities**
- 3  to select **Utilities**
- 4  or  until **Language Select**
- 5  to confirm your selection.
- 6  or  until the desired language is displayed.
- 7  to confirm your selection.
- 8  to exit the menu.

Notes

WARRANTY

LIMITED WARRANTY MOTOROLA COMMUNICATION PRODUCTS

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

MOTOROLA INC. ("MOTOROLA") warrants the MOTOROLA manufactured Communication Products listed below ("Product") against defects in material and workmanship under normal use and service for a period of time from the date of purchase as scheduled below:

CDM1550•LS⁺ Mobile Units Two (2) Years

Product Accessories One (1) Year

Motorola, at its option, will at no charge either repair the Product (with new or reconditioned parts), replace it (with a new or reconditioned Product), or refund the purchase price of the Product during the warranty period provided it is returned in accordance with the terms of this warranty. Replaced parts or boards are warranted

for the balance of the original applicable warranty period. All replaced parts of Product shall become the property of MOTOROLA.

This express limited warranty is extended by MOTOROLA to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA.

MOTOROLA assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of MOTOROLA. Unless made in a separate agreement between MOTOROLA and the original end user purchaser, MOTOROLA does not warrant the installation, maintenance or service of the Product.

MOTOROLA cannot be responsible in any way for any ancillary equipment not furnished by MOTOROLA which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment is expressly excluded from this warranty. Because each system which may use the Product is unique, MOTOROLA disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

II. GENERAL PROVISIONS:

This warranty sets forth the full extent of MOTOROLA'S responsibilities regarding the Product. Repair, replacement or refund of the purchase price, at MOTOROLA's option, is the exclusive remedy. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW.

III. STATE LAW RIGHTS:

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL

OR CONSEQUENTIAL DAMAGES OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION OR EXCLUSIONS MAY NOT APPLY.

This warranty gives specific legal rights, and there may be other rights which may vary from state to state.

IV. HOW TO GET WARRANTY SERVICE:

You must provide proof of purchase (bearing the date of purchase and Product item serial number) in order to receive warranty service and, also, deliver or send the Product item, transportation and insurance prepaid, to an authorized warranty service location. Warranty service will be provided by Motorola through one of its authorized warranty service locations. If you first contact the company which sold you the Product (e.g., dealer or communication service provider), it can facilitate your obtaining warranty service. You can also call Motorola at 1-800-927-2744 US/Canada.

V. WHAT THIS WARRANTY DOES NOT COVER:

- A) Defects or damage resulting from use of the Product in other than its normal and customary manner.
- B) Defects or damage from misuse, accident, water, or neglect.
- C) Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.
- D) Breakage or damage to antennas unless caused directly by defects in material workmanship.
- E) A Product subjected to unauthorized Product modifications, disassembles or repairs (including, without limitation, the addition to the Product of non-Motorola supplied equipment) which adversely affect performance of the Product or interfere with Motorola's normal warranty inspection and testing of the Product to verify any warranty claim.
- F) Product which has had the serial number removed or made illegible.
- G) Rechargeable batteries if:
 - 1) any of the seals on the battery enclosure of cells are broken or show evidence of tampering.

- 2) the damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.
- H) Freight costs to the repair depot.
- I) A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with MOTOROLA's published specifications or the FCC type acceptance labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA.
- J) Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.
- K) Normal and customary wear and tear.

VI. PATENT AND SOFTWARE PROVISIONS:

MOTOROLA will defend, at its own expense, any suit brought against the end user purchaser to the extent that it is based on a claim that the Product or parts infringe a United States patent, and MOTOROLA will pay those costs and damages finally awarded against the end user purchaser in any such suit which are attributable to any such claim, but such defense and payments are conditioned on the following:

- A) that MOTOROLA will be notified promptly in writing by such purchaser of any notice of such claim;
- B) that MOTOROLA will have sole control of the defense of such suit and all negotiations for its settlement or compromise; and
- C) should the Product or parts become, or in MOTOROLA's opinion be likely to become, the subject of a claim of infringement of a United States patent, that such purchaser will permit MOTOROLA, at its option and expense, either to procure for such purchaser the right to continue using the Product or parts or to replace or modify the same so that it becomes non-infringing or to grant such purchaser a credit for the Product or parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or parts as established by MOTOROLA.

MOTOROLA will have no liability with respect to any claim of patent infringement which is based upon the combination of the Product or parts furnished hereunder with software, apparatus or devices not furnished by MOTOROLA, nor will MOTOROLA have any liability for the use of ancillary equipment or software not furnished by MOTOROLA which is attached to or used in

connection with the Product. The foregoing states the entire liability of MOTOROLA with respect to infringement of patents by the Product or any parts thereof.

Laws in the United States and other countries preserve for MOTOROLA certain exclusive rights for copyrighted MOTOROLA software such as the exclusive rights to reproduce in copies and distribute copies of such Motorola software. MOTOROLA software may be used in only the Product in which the software was originally embodied and such software in such Product may not be replaced, copied, distributed, modified in any way, or used to produce any derivative thereof. No other use including, without limitation, alteration, modification, reproduction, distribution, or reverse engineering of such MOTOROLA software or exercise of rights in such MOTOROLA software is permitted. No license is granted by implication, estoppel or otherwise under MOTOROLA patent rights or copyrights.

VII. GOVERNING LAW:

This Warranty is governed by the laws of the State of Illinois, USA.

ACCESSORIES

Motorola offers a number of accessories to enhance the productivity of your two-way radio. Many of the available accessories are listed below. For a complete list, see your Motorola dealer.

MICROPHONES

AARMN4025_	Standard Compact Microphone
AARMN4026_	Enhanced DTMF Keypad Microphone
AARMN4038_	Heavy Duty Microphone
AAREX4617_	Telephone Style Handset with Hang-Up Cup
HLN9073_R	Microphone Hang-Up Clip (all microphones)

HANDSFREE KITS

AARMN4027_	Visor Mounted Microphone
RLN4856_	Footswitch PTT
RLN4857_	Pushbutton PTT
RLN4858_	Gooseneck PTT

EXCHANGEABLE BUTTON KITS

Note: Other individual exchangeable buttons are available through AAD. Please see Basic Service Manual for button numbers.

RLN4831_	Standard Button Kit: MON, SCAN, CALL, HOME, PHONE
RLN5324_	Standard Button Kit: MON, SCAN, CALL, HOME, PHONE, ROAM, SITE

MOUNTING KITS

GLN7324_R	Standard Low Profile Bracket (VHF/UHF)
GLN7317_	High Profile Mounting Bracket (VHF/UHF)
RLN4779_	Key Lock Mounting Bracket (VHF/UHF)
RLN4781_	Direct in Dashboard Mounting Kit (VHF/UHF)
HLN8097_	Removable Slide Mount Tray Package (VHF/UHF - A maximum of two external accessory wires can be attached to the slide tray)

REMOTE MOUNTS

RLN4802_	Remote Mount Kit - CDM1250 and CDM1550 models (requires HKN4192 power cable)
RKN4077_	Remote Mount Cable, 3 meter length
RKN4078_	Remote Mount Cable, 5 meter length
RKN4079_	Remote Mount Cable, 7 meter length

EXTERNAL SPEAKERS

RSN4001_	13 Watt External Loudspeaker
HSN8145_	7.5 Watt External Speaker - for Receiver Audio

INSTALLATION AND ALARM KITS

HKN4137_	Standard 12V 10" Power Cable to Battery (VHF/UHF)
HKN4192_	12V 20 Ft. Power Cable to Battery (VHF/UHF)
GKN6272_	External Alarm Relay and Cable
RLN4836_	Emergency Footswitch
HKN9327_	Ignition Switch Cable
HKN9557_R	PL259/Mini-U Antenna Adapter - 8" Cable

HLN9457_R	Hardware Kit for use with the Expanded Accessory Connector (includes 16 connector pins, (five) 8" wires with pins attached and an extra housing)
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ANTENNAS

HKAD4001_	220 MHz, 1/4-Wave Roof Mount
HAF4012_	Mini-U 746-794 MHz, 1/4-Wave Roof Mount

SERVICE AIDS AND PROGRAMMING EQUIPMENT

H5177	Portable/Mobile Programming Software (CPS) 3 Year Subscription Package - Includes CPS CD ROM Software: HVN9025 for the HT/EX500/CDM/MTX.LS Series and HVN9067 for MTX Series Privacy Plus. Includes HT/MTX Series Programming/Test Cable (AARKN4074). Also is compatible with RLN4460 used for radio testing. (HVN9025 is compatible with Windows® 95/98/2000/Millennium (ME)/ Windows NT®. HVN9067 is compatible with Windows® 95/98/Windows NT®). Note: Software requires a license agreement and is not intended for resale.
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AARKN4081_	Programming Cable with Internal RIB (direct connection from computer to radio microphone connector)
AARKN4083_	Programming Cable (allows radio programming via rear accessory connector)
3080070N01	Programming Cable (connection from RIB to radio)
3080369B72	9 Pin PC to Radio Interface Box Cable (IBM AT or compatible)
RLN4460_	Test Box for Portables and Mobiles
RLN4008_	Radio Interface Box (RIB)
0180357A57	Wall Mounted Power Supply, 120V - used with RLN4008
RLN4853_	10 to 20 Pin Adapter

MANUALS

6864110R14	CDM1550•LS ⁺ 220/700 MHz Detailed Service Manual
6864110R16	CDM1550•LS ⁺ 200/700 MHz Basic Service Manual
6881092C58	Installation Manual (English)

CONTROL STATION KITS

HMN3000_	Desk Microphone (Black)
GLN7326_	Desktop Tray with Speaker
GLN7318_	Desktop Tray without Speaker
HKN9088_	Mobile Mini-U Antenna Adapter - 8 Ft. Cable
HPN4002_R	Power Supply and Cable (1-25 Watt Models)
HPN4001_R	Power Supply and Cable (25-60 Watt Models)

MOBILE DATA UNITS SECTION

Terminals:

RDN7365_	Mobile Status Terminal - Mobile messaging device equipped with a data modem. This will allow a mobile user to report "status messaging" back to the dispatcher by activating one of the status keys.
RDN7366_	Mobile Status Terminal with GPS - Mobile status terminal equipped with an Automatic Vehicle Location (AVL) device compatible with Global Positioning System (GPS).

RDN7367_	Mobile Display Terminal with GPS - Mobile display terminal equipped with an Automatic Vehicle Location (AVL) device compatible with Global Positioning system (GPS).
RDN7368_	Mobile Display Terminal - Mobile messaging device equipped with a data modem. This unit features a 4x40 backlit LCD display and the keypad allows users to send information to the dispatcher in response to base instructions.
RDN7369_	Standalone Modem/GPS - Cost efficient Automatic Vehicle Location (AVL) device compatible with Global Positioning System (GPS).
RDN7738_	Serial Breakout Unit (used in multiple applications that allow up to eight base modems to be connected).

Radio Interface Cables: One radio interface cable is required with purchase of each hardware device

RDN7370_	3 Ft. Interface Cable with 16 Pin Connector
RDN7376_	15 Ft. Interface Cable with 16 Pin Connector
RDN7739_	3 Ft. Flying Cable (same as regular interface cable, but omits connectors).

RDN7740_	15 Ft. Flying Cable (same as regular interface cable, but omits connectors).
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Peripherals:

RDN7371_	Credit Card Reader - Card reader is used to perform automatic online credit card authorization transaction. Used with RDN7379 (credit card software).
RDN7373_	Mobile Printer - The mobile printer provides users with a hard copy of the information transmitted from the base dispatch location.

Global Positioning System (GPS) Antennas:

Antenna is required with purchase of any GPS unit

RDN7372_	Fixed Mount GPS Active Antenna
RDN7375_	Magnetic Mount GPS Active Antenna

Software:

RDN7374_	Programming Software - Used for mobile data units.
RDN7377_	Regional Map Software - Will allow up to 10 selected US counties.

RDN7378_	AVL Messaging Status Software - Mapping software that provides the user with Automatic Vehicle Location to track vehicles along with message dispatch and status tracking capability.
RDN7379_	Credit Card Software - Used with RDN7371 (credit card reader).

Miscellaneous:

RDN7364_	Radio Channel Card - A radio channel controller and modem that interface with the base radio. Required with every radio channel or wireless circuit used within the system.
RDN7380_	Mobile Programming Hardware

PUBLIC ADDRESS

RLN5288_	Public Address Kit (includes interface cable)
HKN9323_	8 Ft. Public Address Speaker Cable
HKN9324_	15 Ft. Public Address Speaker Cable (one cable per speaker)
HSN1000_R	6 Watt Amplified External Speaker

RETROFIT KIT

6686119B01	Dismantling Tool
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Notes:

1.  or  to select desired trunked zone.
2.  or  until you see desired preprogrammed talkgroup on the display.

1. Press **PTT** button. If trunked system access was successful — Red LED = steady; if unsuccessful —LED = flashing; red-low pitched tone sounds.
2. Speak clearly into microphone. Release **PTT** button to listen.

PASSPORT	Upon power up, PassPort alias appears on the LCD.
TLKGRP ALIAS	The selected talkgroup alias appears on the LCD.
SEARCHING	May appear if a PassPort site cannot be quickly located.
REG SITE XXX	Appears indicating successful PassPort registration (XXX = PassPort site on which you are registered).
TLKGRP ALIAS	Selected talkgroup alias appears and remains on the display upon successful registration.

1.  or  to select desired conventional zone.
2.  or  until you see desired conventional channel on the display.

- Press **PTT** button and speak clearly into microphone. LED = steady while call is being sent. Release **PTT** button to listen.

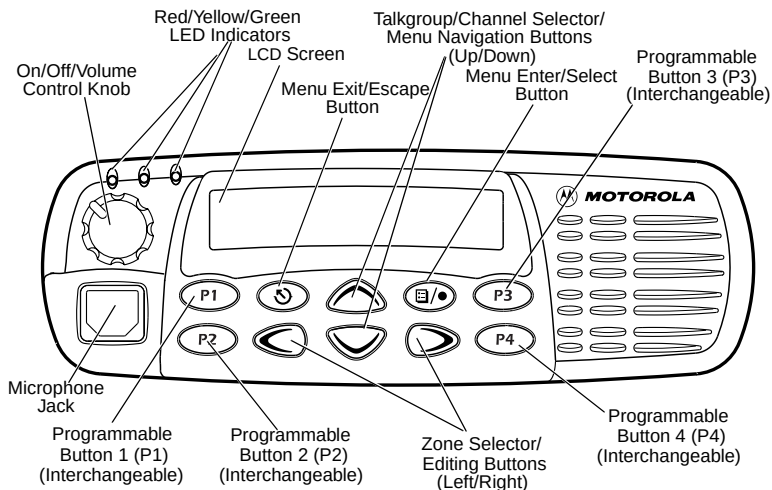
-  or , then  or  to desired talkgroup or channel. Make sure **PTT** button is released. When a call is received, the LED flashes.

1. From Selective Call menu, select or enter desired radio ID number.
2. Press **PTT** button to send the call. The radio sounds a continuous tone.
3. Press **PTT** button and talk; release **PTT** button to listen.

- When a Selective Call is received, the radio displays 🎵 symbol and name or ID of calling radio; the yellow LED flashes. Press **PTT** button to answer.



Record the functions for your radio's programmable buttons in the table provided below. For further information, see pages 24 and 25 in this User Guide.

[illegible]

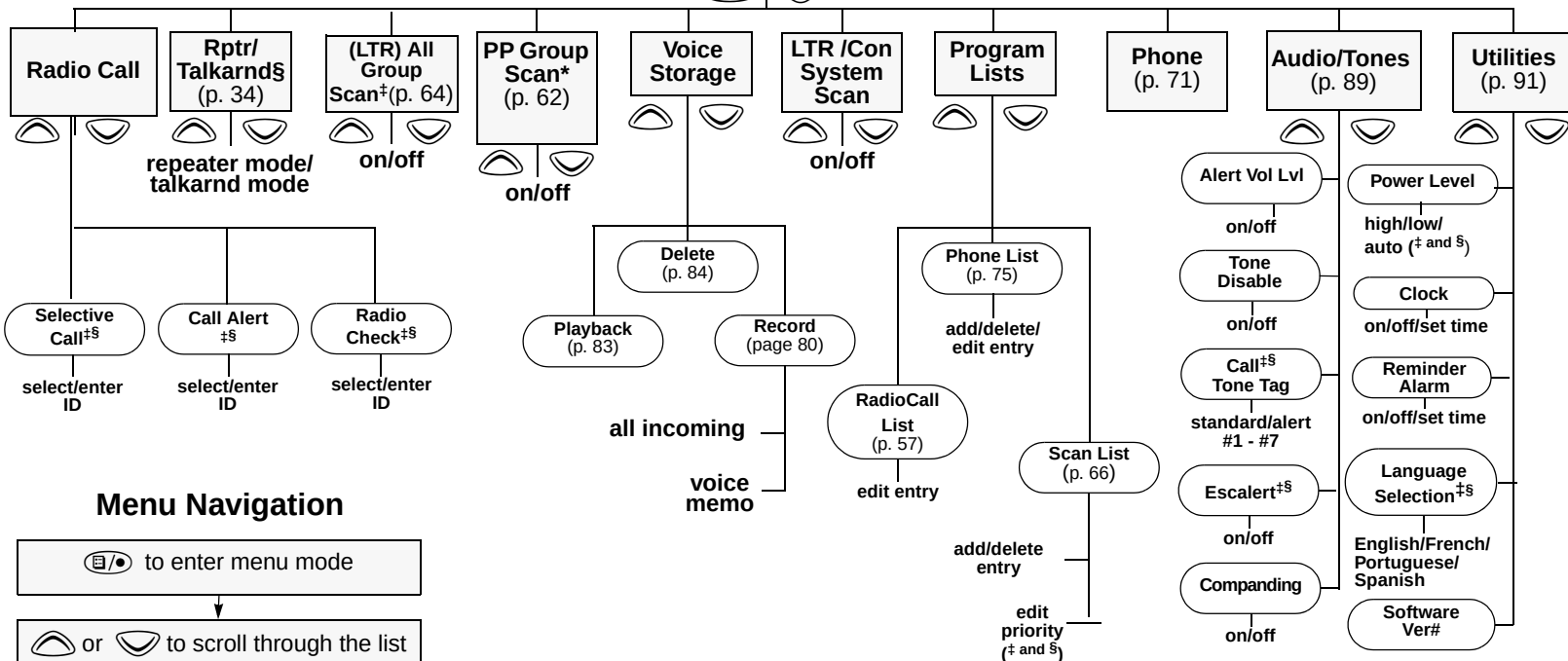
Menu Navigation Chart

(Refer to Menu Navigation guidelines—
lower, left-hand corner of this page)

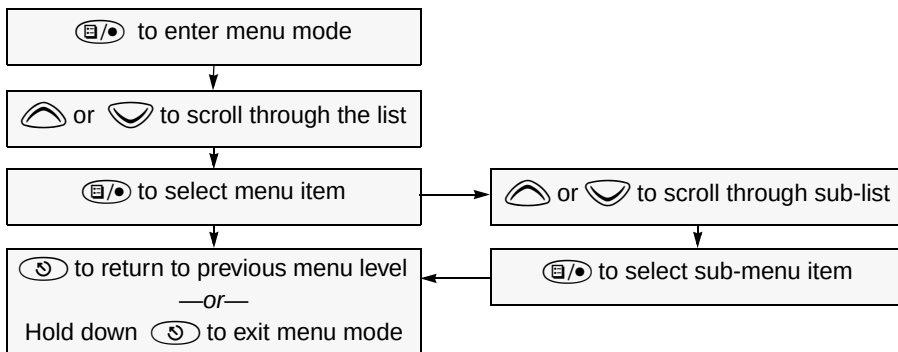
* — Available in PassPort trunked zones only

‡ — Available in LTR trunked zones only

§ — Available in conventional zones only



Menu Navigation



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