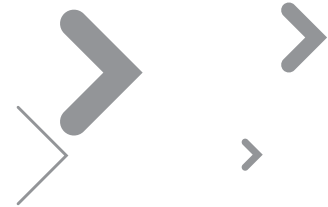
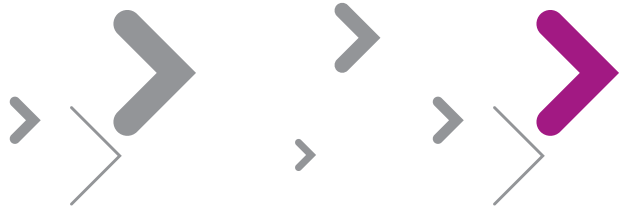




# ***CP185™ Series***

## ***Radio User Guide***





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# SAFETY

## PRODUCT SAFETY AND RF EXPOSURE COMPLIANCE



Caution

Before using this product, read the operating instructions for safe usage contained in the Quick Reference Card enclosed with your radio.

### ATTENTION!

**This radio is restricted to occupational use only to satisfy FCC RF energy exposure requirements.** Before using this product, read the RF energy awareness information and operating instructions in the radio's enclosed Quick Reference Card (Motorola Publication part number 68007024011) to ensure compliance with RF energy exposure limits.

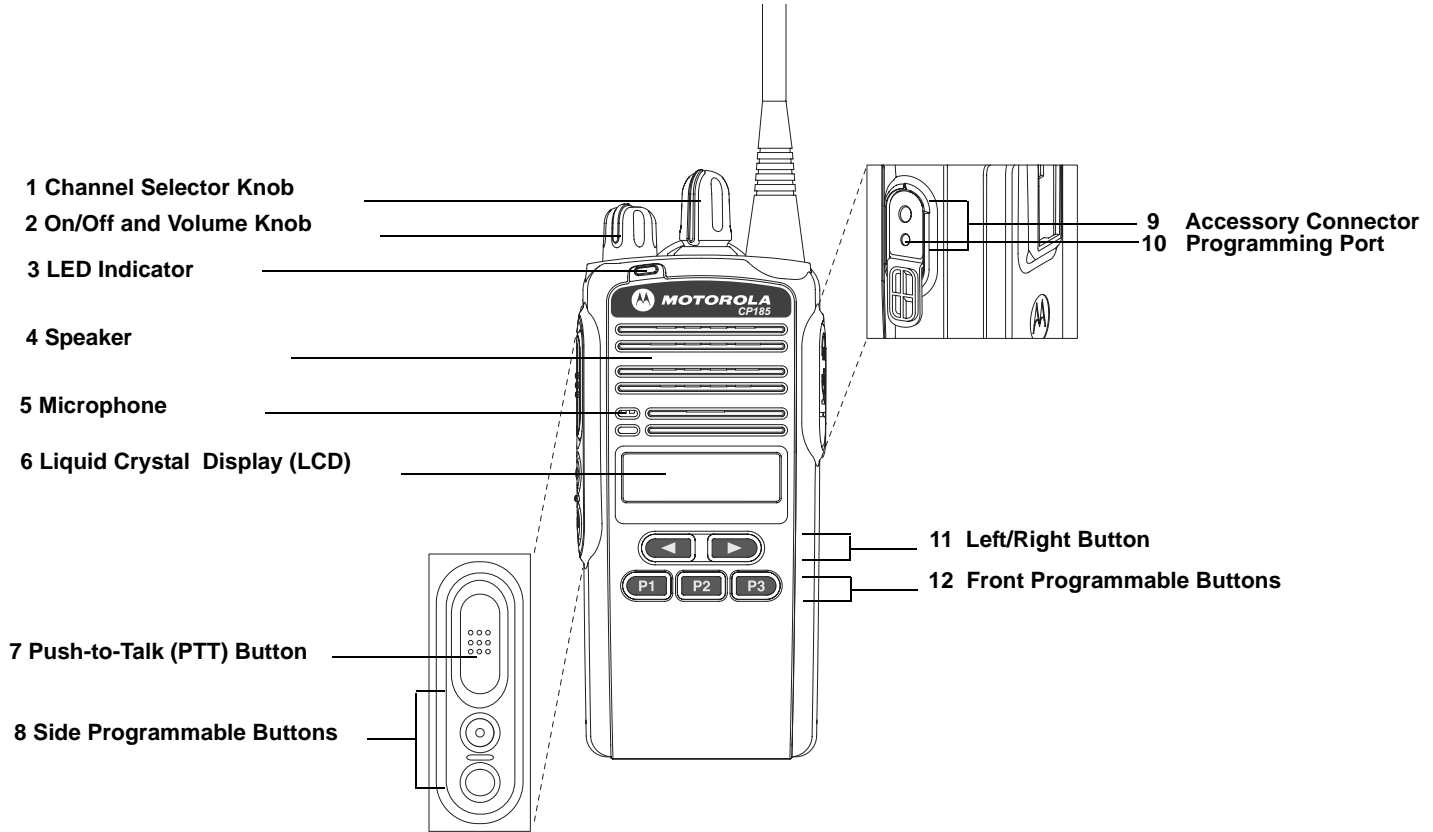
# Notes

**SAFETY**

English

iv

# RADIO OVERVIEW



**1. Channel Selector Knob**

Used to select channels in normal radio operation mode.

**2. On/Off and Volume Knob**

Turn the **ON/OFF/Volume Control** knob clockwise to turn the radio ON.

Turn the **ON/OFF/Volume Control** knob counterclockwise to turn the radio OFF.

Turn this knob clockwise to increase the volume.

Turn this knob counterclockwise to decrease the volume.

**3. LED Indicator**

Indicates radio transmit, receive, scan and monitor status. Refer to "LED Colors" on page 3 for more information.

**4. Speaker**

Receives audio messages through the speaker.

**5. Microphone**

Speak into the microphone when sending messages.

**6. Liquid Crystal Display (LCD)**

An 8 character single line display with up to 9 radio status icons. Refer to "LCD Display and Icons" on page 4 for more details.

**7. Push-to-Talk (PTT) Button**

Press and speak to microphone to send message.

Release and listen to receive messages.

**Note:** If a channel is programmed with the Busy Channel Lockout feature, the user can only transmit if the channel is not in receiving mode.

**8. Side Programmable Buttons**

Refer to "Programmable Buttons" on page 5 for more details.

**9. Accessory Connector**

2.5 mm audio in port and 3.5 mm audio out port are used to connect compatible accessories to the radio.

**10. Programming Port**

2.5 mm audio in lower port used by dealer to program the radio.

**11. Left/Right Button**

Used to navigate menu, sub-menu or parameter selections in Front Panel Feature and Button Configuration Mode.

**12. Front Programmable Buttons**

Refer to "Programmable Buttons" on page 5 for more details.












## LED COLORS

| LED Color | State           | Indication   |
|-----------|-----------------|--|
| Green     | Illuminated     | Radio is transmitting in normal mode.<br>Radio is transmitting in Scrambling Mode.   |
|           | Normal Blinking | Radio is receiving in normal mode.<br>Channel is busy.<br>Radio passed self-test during powering up.                         |
| Amber     | Illuminated     | Monitor activated.<br>Permanent Sticky Monitor activated.  |
|           | Normal Blinking | Radio is in active Scan Mode.<br>Radio is receiving in Scrambling Mode.  |
| Red       | Normal Blinking | Radio is transmitting in normal mode while battery is low.<br>Radio is transmitting in Scrambling Mode while battery is low. |
|           | Fast Blinking   | Radio failed self-test during powering up.   |

## LCD Display and Icons





Displays selected channel, programming parameters, status messages and any error or information messages.

| LCD Indicator   | Description               | Function  |
|---|---------------------------|---|
|  | Signal Strength Indicator | Shows the signal strength. More bars indicate a stronger signal received by radio.  |
|  | Power Level Indicator     | "L" illuminates to indicate radio is configured to transmit in low power; "H" illuminates when radio transmits in high power.   |
|  | Talkaround Indicator      | Illuminates when radio is not transmitting through the repeater.  |
|  | Monitor Indicator         | Illuminates when monitoring a selected channel.   |
|  | Scan Indicator            | Blinks without dot when normal scan is activated.<br>Illuminates without dot when there is some activity on a non-priority channel.<br>Illuminates with dot blinking to indicate that there is some activity on the priority channel. |

| LCD Indicator   | Description                          | Function  |
|---|--------------------------------------|---|
|  | Voice Inversion Scrambling Indicator | Illuminates when Scrambling Mode is on.   |
|  | Programming Mode Indicator           | Illuminates when Programming Mode is on.  |
|  | Keypad Lock Indicator                | Illuminates when keypad is locked.  |
|  | Battery Level Indicator              | Shows remaining charge in battery based on how many bars (1 – 3) are displayed. Blinks when the battery is low. |

## Programmable Buttons

The programmable buttons consist of:

- Side Programmable Button 1 
- Side Programmable Button 2 
- Front Programmable Button 1 
- Front Programmable Button 2 
- Front Programmable Button 3 

The following functions can be assigned as short press i.e. press and release; or long press i.e. press and hold for more than 1 second.

| Button        | Function  |
|---------------|---|
| Backlight     | Toggles backlight display between ON and OFF.   |
| Channel Alias | Toggles display between Channel Number and Channel Alias.   |
| Keypad Lock   | Locks or unlocks all buttons except PTT, Side Programmable Button 1, Side Programmable Button 2, Channel Selector Knob and ON/OFF/ Volume Knob. Applicable for Long Press Only. |

| Button                    | Function  |
|---------------------------|---|
| Monitor                   | Monitors the channel for any activity as long as the button is pressed.                                   |
| Nuisance Channel Delete   | Removes unwanted channel(s) temporarily from scan list during Scan. Applicable for Long Press Only.       |
| TPL/DPL Enable            | Enables or disables radio from requiring matching TPL/DPL to unsquelch.                                   |
| Power Level               | Selects required power level: High or Low.  |
| Reverse Burst             | Select the Reverse Burst Type: None, 180 or 240.  |
| Channel Scan              | Starts or stops Channel Scan.   |
| Scrambling Code Select    | Toggles between the two scrambling codes available.   |
| Scrambling Enable/Disable | Enables or disables scrambling feature for the selected channel. Applicable for Long Press Only.          |
| Squelch Level             | Selects desired squelch level: Normal or Tight.   |
| Sticky Monitor            | Toggles the permanent monitor function until the button is pressed again. Applicable for Long Press Only. |
| Talkaround/ Repeater Mode | Enables toggle between repeater and talkaround mode operations.   |
| Unassigned                | No function is programmed to this button.   |

| Button     | Function  |
|------------|---|
| Volume Set | Controls the audio level. A programmable button used to control the audio level. The button emits a continuous tone to indicate the current volume level. To change volume level, turn the volume knob to the desired level while pressing the programmable button. Applicable for Long Press only. |
| VOX        | Enables or disables VOX feature for the selected channel.   |

The default functions assigned to your radio are described in the table below.

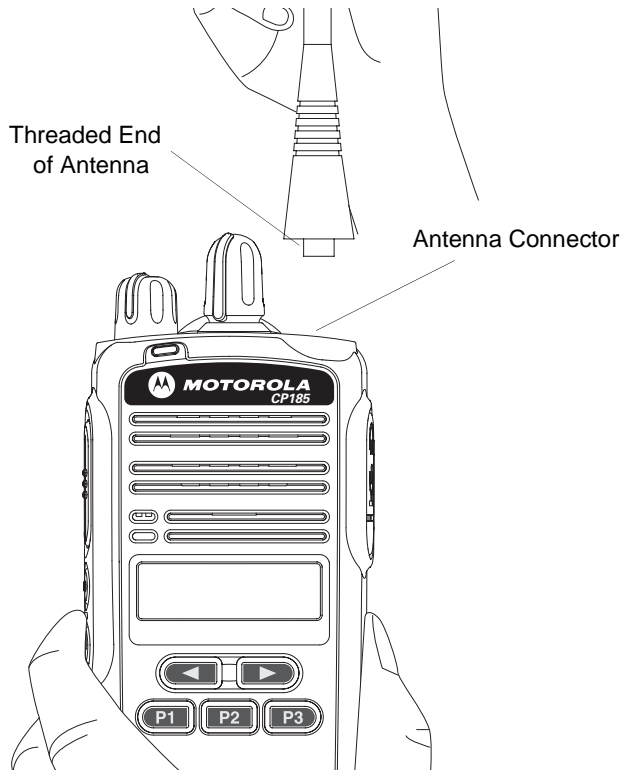
| Press Type         | Side Button 1 | Side Button 2 | Front Button 1 | Front Button 2          | Front Button 3 |
|--------------------|---------------|---------------|----------------|-------------------------|----------------|
| <b>Short Press</b> | Unassigned    | Unassigned    | Monitor        | Scan                    | Power Level    |
| <b>Long Press</b>  | Unassigned    | Unassigned    | Sticky Monitor | Nuisance Channel Delete | Unassigned     |

If your dealer has re-programmed your radio's programmable buttons, you may want to write down the new functions in the table below.

| Press Type         | Side Button 1 | Side Button 2 | Front Button 1 | Front Button 2 | Front Button 3 |
|--------------------|---------------|---------------|----------------|----------------|----------------|
| <b>Short Press</b> |               |               |                |                |                |
| <b>Long Press</b>  |               |               |                |                |                |

## GETTING STARTED

### Attaching and Removing the Antenna



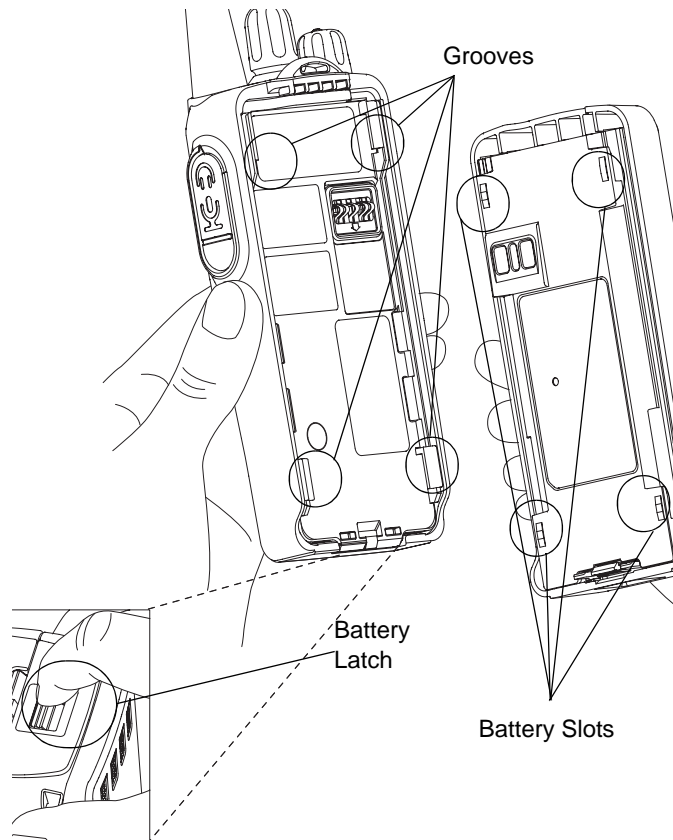
#### To Attach Antenna

1. Fasten the antenna to the radio by placing the threaded end of the antenna into the Antenna Connector.
2. Rotate the antenna clockwise until tight.

#### To Remove Antenna

1. Turn the antenna in a counterclockwise direction until it disengages from the radio.

## Attaching and Removing the Battery



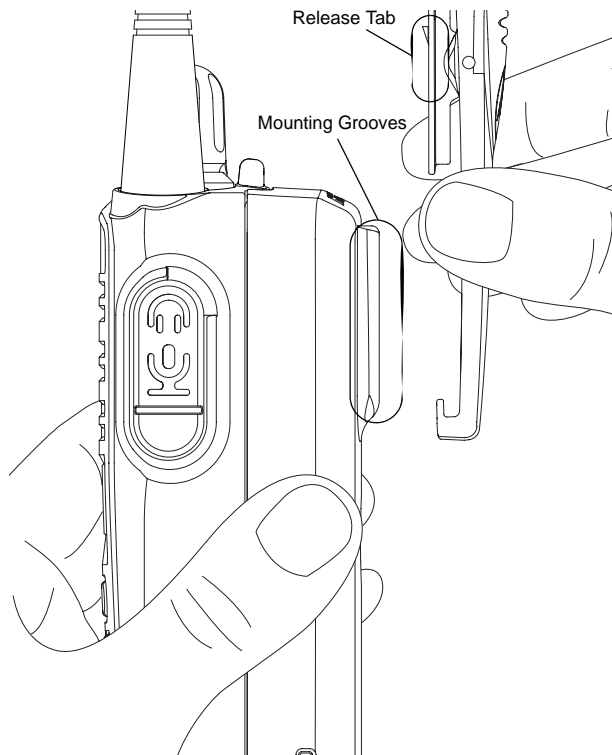
### To Attach Battery

1. Fit the battery slots with the grooves on the radio.
2. Slide the battery upwards until a click is heard.

### To Remove Battery

1. Slide the battery latch away from the radio.
2. Slide the battery downwards.
3. Pull the battery away from the radio.

## Attaching and Removing the Belt Clip



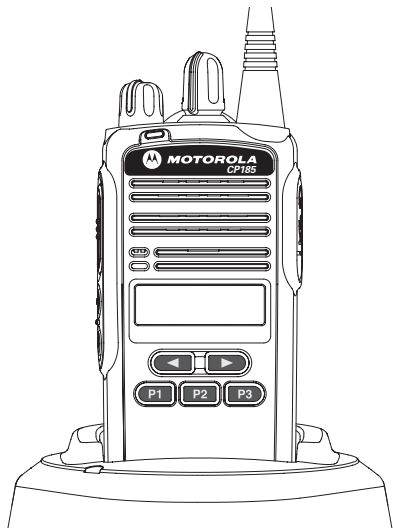
### To Attach Belt Clip

1. Align mounting rails of the belt clip with the grooves of the radio.
2. Slide the belt clip downwards until it clicks into place.

### To Remove Belt Clip

1. Safely insert a flat tool between the release tab and the back surface of the radio.
2. Lift the release tab.
3. Slide the belt clip upwards.

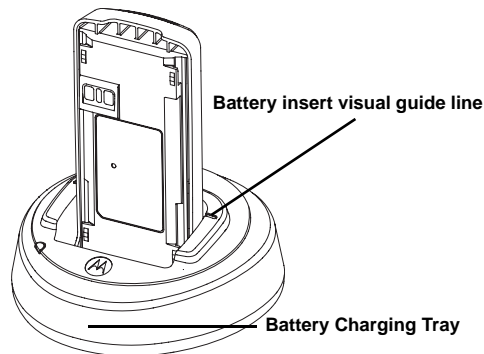
## Charging the Battery



1. Make sure the radio is OFF.
2. Plug the power supply into an electric outlet.
3. Connect the power supply output cord connector into the rear of the Desktop Charging Tray.
4. The LED on the charger blinks green once to indicate charger is turned ON.

5. Turn the radio OFF before charging the battery. Insert a battery, or a radio with a battery into the charger's pocket by:
  - aligning the groove on each side of the battery with the corresponding raised rail on each side of the charger pocket
  - OR
  - pressing the battery towards the rear of the pocket
  - OR
  - sliding the battery into the charger pocket, ensuring complete contact between the charger and battery contacts.
6. The charger's LED color will indicate the battery charging status. (See "Charging Status" on page 11).

Refer to picture below for the battery insert visual guide line.





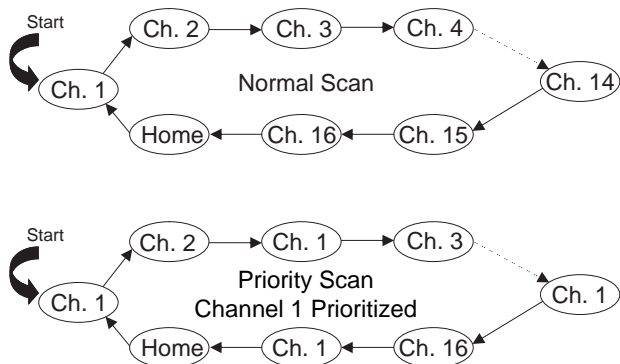
| LED Color          | Charging Status   |
|--------------------|-------------------|
| Solid Red          | Charging          |
| Blinking Red       | Battery Fault     |
| Solid Green        | Charge Complete   |
| Blinking Green     | Trickle Charging  |
| Single Green Blink | Power On          |
| Blinking Yellow    | Waiting to Charge |

**Note:** To get the maximum use from a new battery, charge it overnight (12 to 16 hours) before using the battery for the first time. The typical time needed to completely charge the discharged battery is estimated within 2.5 to 5 hours depending on its cell chemistry. Once the charger LED turns solid green, the charging process is done.

# SCAN

Scan allows you to monitor multiple channels and receive calls that are transmitted on them.

Two types of scan are supported: Normal Scan and Priority Scan. Normal Scan searches all channels sequentially in the radio's scan list, whereas Priority Scan allocates 50% of the scanning time to the Priority Channel (the first channel in the designated scan list).



During scan, when activity is detected that meets the unsquelch condition, the radio stops scanning and switches to that channel; the  $\Sigma$  indicator is illuminated, and the channel number is displayed. When no activity is detected for a pre-set time, the radio resumes scanning.

If your radio has switched to a non-priority channel during priority scan, it still checks for activity on the priority channel. If activity is detected there, the radio switches to the priority channel.

The radio transmits on the Home Channel, if PTT is pressed during scanning. If the radio stops scanning, and changes to a particular channel, all transmit and receive activity is performed on that channel.

- Press the *Scan* button to begin channel scanning. The  $\Sigma$  indicator blinks to indicate that the radio is scanning. The LCD screen shows the Home Channel where the scan began.
- Press *Scan* button to stop scanning.

## Deleting a Nuisance Scan Channel

A channel with unwanted activity is called a Nuisance Channel. You can remove a Nuisance Channel from the scan list temporarily. To remove a Nuisance Channel

- Press the *Nuisance Channel Delete* programmable button, when your radio stops on a Nuisance Channel. A high-pitched tone is heard.

You cannot remove the *Home* or *Priority* Channel from the scan list. If attempted, a low-pitched tone is heard, and no action is taken.

To reinstate the deleted channel(s) into the scan list, restart scan, or simply turn off your radio and turn it on again.

## VOICE OPERATED TRANSMIT (VOX)

VOX needs to be enabled for each channel in Customer Programming Software (CPS) before VOX Accessories can be used with radio. When the VOX headset/microphone is connected, your radio may be used in hands-free operation.

### To start the VOX feature

1. Connect the VOX headset to the accessory connector of the radio. Make sure the radio is turned OFF before connecting the VOX accessory.
2. Turn the radio ON.

### To disable the VOX feature

1. Press the PTT button on the radio. This allows you to use the VOX headset, but you must press the radio PTT to transmit.

### To re-enable the VOX feature

1. Turn the radio OFF, and turn it ON again, with the headset connected to the accessory connector, or
2. Change channel with the VOX headset connected.

To adjust the VOX sensitivity level, see “ACCESSORY (Accessory)” on page 17 of this user guide.

## VOICE INVERSION SCRAMBLING

Your radio has the Voice Inversion Scrambling feature which gives you an extra layer of privacy. This scrambling function is implemented via a frequency inversion in analog mode.

**Note:** This feature needs to be enabled using Customer Programming Software (CPS) before it can be activated.

### To Enable and Disable the Scrambling Mode

Configure one of the programmable buttons for Scrambling Mode. Press this button to enable or disable the function. You can also configure this function via the Front Panel Feature and Button Configuration Mode (See "Entering Front Panel Feature and Button Configuration Mode" Menu on page 15).

### To Change the Scrambling Code


Configure one of the programmable buttons for Scrambling Code. Press this button to toggle between the two codes. You can also configure this function via the Front Panel Feature and Button Configuration Mode (See "Exiting Front Panel Feature and Button Configuration Mode" Menu on page 15).

## FRONT PANEL FEATURE AND BUTTON CONFIGURATION MODE

This mode allows you to change the feature parameters to enhance the use of your radio.

**Note:** This mode must be enabled using Customer Programming Software (CPS) before it can be activated.

### Entering Front Panel Feature and Button Configuration Mode



If your radio is turned ON, turn it OFF. Press and hold the side programmable button 1, and turn your radio ON. A tone is heard, indicating that your radio is in Feature and Button Configuration Mode. The  indicator illuminates and the “BCKLIGHT” is displayed on the radio LCD screen.

### Exiting Front Panel Feature and Button Configuration Mode

Turn the radio OFF to exit Feature and Button Configuration Mode.

## Assessing Front Panel Feature and Button Configuration Mode Parameters

### To Navigate

Press the  or  to scroll through the parameters for each menu or sub-menu item.

### To Select Settings

Press the PTT button to select menu or sub-menu item.

### To Exit Selection Without Changes or To Return To Previous Menu Level





Press side programmable button 1 to return to previous menu level or to exit the selection parameter without change.

| Main Menu               | 1st Level Sub-Menu       | 2nd Level Sub-Menu | Settings  | Remarks   |
|-------------------------|--------------------------|--------------------|---|---|
| BCKLIGHT<br>(Backlight) | —                        | —                  | AUTO<br>TOGGLE  | Selecting AUTO causes the backlight to automatically extinguish, if there is no keypress for more than 5 seconds. Pressing the Backlight button again prolongs illumination time.<br>Selecting TOGGLE allows the Backlight button toggle to control the ON/OFF status of the backlight. |
| BATTERY                 | SAVER<br>(Battery Saver) | —                  | OFF<br>NORMAL<br>ENHANCED   | Helps to extend the battery life. When enabled, it turns off radio receiver circuitry periodically when no activity is detected.<br>NORMAL – turns off the receiver less frequently.<br>ENHANCED – turns off the receiver for a longer duration to maximize battery saving.             |
|                         | TYPE<br>(Battery Type)   | —                  | NIMH (Nickel Metal<br>Hydride)<br>LI-ION (Lithium-Ion)<br>H LI-ION (High<br>Capacity<br>Lithium- Ion) | Selects the type of battery that the radio uses.  |

| Main Menu                       | 1st Level Sub-Menu                     | 2nd Level Sub-Menu | Settings                  | Remarks  |
|---------------------------------|--|--------------------|---------------------------|--|
| ACCESORY<br>(Accessory)         | SPK GAIN<br>(External Speaker Gain)    | —                  | +2<br>+1<br>0<br>-1<br>-2 | Allows you to adjust the external speaker loudness when accessories are connected to radio. +2 will set the external speaker gain to maximum level and -2 will set the external speaker gain to minimum level.                           |
|                                 | MIC GAIN<br>(External Microphone Gain) | —                  | +2<br>+1<br>0<br>-1<br>-2 | Allows you to adjust the external microphone sensitivity when accessories are connected to radio. +2 will set the external microphone sensitivity to maximum level and -2 will set the external microphone sensitivity to minimum level. |
| TONE VOL<br>(Alert Tone Volume) | —                                      | —                  | ON<br>OFF                 | Selects the alert tone volume preference. Select OFF, if quiet operation is required. Select ON, if working in a noisy environment.  |

| Main Menu | 1st Level Sub-Menu           | 2nd Level Sub-Menu  | Settings   | Remarks   |
|-----------|------------------------------|---------------------|--|---|
| CHANNEL   | RX PL<br>(RX TPL/DPL)        | CH-001...<br>CH-016 | CSQ      CSQ<br>067.0 ...      001 ...<br>254.1            042<br>023 ...      or      043<br>754              127<br>TPL 1            TPL 1<br>TPL 2            TPL 2<br>TPL 3            TPL 3 | Allows you to select the range of Receive PL setting (CSQ, TPL 67.0 - TPL 254.1, DPL 023 - DPL 754, user defined TPL 1, user defined TPL 2, & user defined TPL 3) if frequency is selected for PL display type.<br>or<br>Allows you to select the range of Receive PL setting (CSQ, 001 - 127, user defined TPL 1, user defined TPL 2, & user defined TPL 3) if code is selected for PL display type.   |
|           | TX PL<br>(TX TPL/DPL)        | CH-001...<br>CH-016 | CSQ      CSQ<br>067.0 ...      001 ...<br>254.1            042<br>023 ...      or      043<br>754              127<br>TPL 1            TPL 1<br>TPL 2            TPL 2<br>TPL 3            TPL 3 | Allows you to select the range of Transmit PL setting (CSQ, TPL 67.0 - TPL 254.1, DPL 023 - DPL 754, user defined TPL 1, user defined TPL 2, & user defined TPL 3) if frequency is selected for PL display type.<br>or<br>Allows you to select the range of Transmit PL setting (CSQ, 001 - 127, user defined TPL 1, user defined TPL 2, & user defined TPL 3) if code is selected for PL display type. |
|           | SQUELCH<br>(Squelch Level)   | CH-001...<br>CH-016 | NORMAL<br>TIGHT  | NORMAL squelch level allows the radio to receive weak signals. TIGHT squelch level allows the radio to receive strong signals and eliminates unwanted noise.  |
|           | TIME OUT (Time Out<br>Timer) | —                   | OFF<br>010<br>020<br>...<br>590<br>600   | This determines the maximum duration (in seconds) that the radio can transmit continuously.   |



| Main Menu | 1st Level Sub-Menu                    | 2nd Level Sub-Menu                          | Settings              | Remarks  |
|-----------|---------------------------------------|---|-----------------------|--|
| SCAN      | LIST 1<br>(Scan List 1)               | 01-XXX<br>02-XXX<br>...<br>15-XXX<br>16-XXX | 001...<br>016         | Allows you to set members of Scan List 1. "XXX" denotes the selected scan list member. " _ _ _ " shows that no scan list member is selected. User can use the  button or the  button to scroll the valid channel list and press PTT to set the selection.                |
|           | LIST SEL<br>(Scan List Select)        | CH-001<br>...<br>CH-016                     | LIST1 (Scan List 1)   | Allows you to set the scan list for a selected channel.  |
|           | SCAN TYP<br>(Scan Type Select)        | CH-001<br>...<br>CH-016                     | NORMAL<br>PRIORITY    | Allows you to set scan type either Normal Scan or Priority Scan for a selected channel.  |
|           | PRIORITY<br>(Priority Channel Select) | LIST1<br>(Scan List 1)                      | _ _ _ _<br>...<br>XXX | Allows you to set priority channel for scan list 1. "XXX" denotes the selected priority channel. " _ _ _ " shows that no priority channel is selected. User can also use the  button or the  button to scroll the valid channel list and press PTT to set the selection. |

## TPL AND DPL FREQUENCIES AND CODES

The following information in the tables are to guide the user to select the appropriate TPL (Tone Private Line) or DPL (Digital Private Line) codes so that they can expand usage of the frequency.

### TPL Frequency

**Table 1: TPL Frequency**

| TPL Freq (Hz) | Equivalent PL Code | Motorola Code |
|---------------|--------------------|---------------|
| 67.0          | XZ                 | 001           |
| 69.3          | WZ                 | 002           |
| 71.9          | XA                 | 003           |
| 74.4          | WA                 | 004           |
| 77.0          | XB                 | 005           |
| 79.7          | WB                 | 006           |
| 82.5          | YZ                 | 007           |
| 85.4          | YA                 | 008           |
| 88.5          | YB                 | 009           |
| 91.5          | ZZ                 | 010           |
| 94.8          | ZA                 | 011           |

**Table 1: TPL Frequency**

| TPL Freq (Hz) | Equivalent PL Code | Motorola Code |
|---------------|--------------------|---------------|
| 97.4          | ZB                 | 012           |
| 100.0         | 1Z                 | 013           |
| 103.5         | 1A                 | 014           |
| 107.2         | 1B                 | 015           |
| 110.9         | 2Z                 | 016           |
| 114.8         | 2A                 | 017           |
| 118.8         | 2B                 | 018           |
| 123.0         | 3Z                 | 019           |
| 127.3         | 3A                 | 020           |
| 131.8         | 3B                 | 021           |
| 136.5         | 4Z                 | 022           |
| 141.3         | 4A                 | 023           |
| 146.2         | 4B                 | 024           |
| 151.4         | 5Z                 | 025           |
| 156.7         | 5A                 | 026           |
| 162.2         | 5B                 | 027           |
| 167.9         | 6Z                 | 028           |
| 173.8         | 6A                 | 029           |
| 179.9         | 6B                 | 030           |

**Table 1: TPL Frequency**

| TPL Freq (Hz)   | Equivalent PL Code | Motorola Code |
|---|--------------------|---------------|
| 186.2   | 7Z                 | 031           |
| 192.8   | 7A                 | 032           |
| 203.5   | M1                 | 033           |
| 206.5   | 8Z                 | 034           |
| 210.7   | M2                 | 035           |
| 218.1   | M3                 | 036           |
| 225.7   | M4                 | 037           |
| 229.1   | 9Z                 | 038           |
| 233.6*  | M5                 | 039           |
| 241.8   | M6                 | 040           |
| 250.3   | M7                 | 041           |
| 254.1*  | 0Z                 | 042           |
| TPL1*   | —                  | TPL1          |
| TPL2*   | —                  | TPL2          |
| TPL 3*  | —                  | TPL3          |
| <p><b>Note:</b> The TPL Frequencies marked with an asterisk (*) are not part of the 39 standard EIA/TIA-603 CTCSS Code Frequency.</p> |                    |               |

## DPL Codes

Table 2: DPL Codes

| DPL Code | Motorola Code |
|----------|---------------|
| 023      | 043           |
| 025      | 044           |
| 026      | 045           |
| 031      | 046           |
| 032      | 047           |
| 043      | 048           |
| 047      | 049           |
| 051      | 050           |
| 054      | 051           |
| 065      | 052           |
| 071      | 053           |
| 072      | 054           |
| 073      | 055           |
| 074      | 056           |
| 114      | 057           |
| 115      | 058           |
| 116      | 059           |

Table 2: DPL Codes

| DPL Code | Motorola Code |
|----------|---------------|
| 125      | 060           |
| 131      | 061           |
| 132      | 062           |
| 134      | 063           |
| 143      | 064           |
| 152      | 065           |
| 155      | 066           |
| 156      | 067           |
| 162      | 068           |
| 165      | 069           |
| 172      | 070           |
| 174      | 071           |
| 205      | 072           |
| 223      | 073           |
| 226      | 074           |
| 243      | 075           |
| 244      | 076           |
| 245      | 077           |

**Table 2: DPL Codes**

| DPL Code | Motorola Code |
|----------|---------------|
| 251      | 078           |
| 261      | 079           |
| 263      | 080           |
| 265      | 081           |
| 271      | 082           |
| 306      | 083           |
| 311      | 084           |
| 315      | 085           |
| 331      | 086           |
| 343      | 087           |
| 346      | 088           |
| 351      | 089           |
| 364      | 090           |
| 365      | 091           |
| 371      | 092           |
| 411      | 093           |
| 412      | 094           |
| 413      | 095           |

**Table 2: DPL Codes**

| DPL Code | Motorola Code |
|----------|---------------|
| 423      | 096           |
| 431      | 097           |
| 432      | 098           |
| 445      | 099           |
| 464      | 100           |
| 465      | 101           |
| 466      | 102           |
| 503      | 103           |
| 506      | 104           |
| 516      | 105           |
| 525(*)   | 106           |
| 532      | 107           |
| 546      | 108           |
| 565      | 109           |
| 606      | 110           |
| 612      | 111           |
| 624      | 112           |
| 627      | 113           |

**Table 2: DPL Codes**

| DPL Code   | Motorola Code |
|--|---------------|
| 631  | 114           |
| 632  | 115           |
| 645(*)   | 116           |
| 654  | 117           |
| 662  | 118           |
| 664  | 119           |
| 703  | 120           |
| 712  | 121           |
| 723  | 122           |
| 731  | 123           |
| 732  | 124           |
| 734  | 125           |
| 743  | 126           |
| 754  | 127           |
| <p><b>Note:</b> The codes marked with an asterisk (*) are not part of the 83 standard EIA/TIA-603 codes.</p> |               |

# WARRANTY

## WHAT DOES THIS WARRANTY COVER?

MOTOROLA INC. ("MOTOROLA") warrants its MOTOROLA manufactured Radius Communication Products ("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:

## Products and Accessories

| Products Covered                                       | Length of Coverage   |
|--|--|
| CP185 Two-Way Radio                                    | <b>Two (2) years</b>   |
| Motorola Accessories                                   | <b>One (1) year</b>  |
| Mag One Accessories                                    | <b>Six (6) months</b>  |
| Products and Accessories that are Repaired or Replaced | <b>The balance of the original warranty or for ninety (90) days</b> from the date returned to the consumer, whichever is longer. |

### NOTE:

Rechargeable batteries will be replaced during the applicable warranty period if:  
A) the battery capacity falls below 80% of rated capacity, or  
B) the battery develops leakage.

MOTOROLA, at its option, will at no charge either repair or replace this Product during the warranty period provided it is returned in accordance with the terms of this warranty to the place of purchase. Repair, at MOTOROLA's option, may include the replacement of parts or boards with functionally equivalent reconditioned or new parts or boards. Replaced parts or boards are warranted for the balance of the original applicable warranty period. All replaced parts or Product shall become the property of MOTOROLA.

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

#### **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, disassemblies, 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:
  - i) any of the seals on the battery enclosure of cells are broken or show evidence of tampering.
  - ii) 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. Unapproved upgrades or modifications.
- 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.

**Software**

| Products Covered  | Length of Coverage  |
|---|---|
| <p><b>Software.</b> Applies only to physical defects in the media that embodies the copy of the software (e.g. CD-ROM, or floppy disk).</p> | <p><b>Ninety (90) days</b> from the date of purchase.</p> |

**Exclusions**

**Software Embodied in Physical Media.** No warranty is made that the software will meet your requirements or will work in combination with any hardware or software applications provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected.

**Software NOT Embodied in Physical Media.** Software that is not embodied in physical media (e.g. software that is downloaded from the internet), is provided “as is” and without warranty.

**WHO IS COVERED?**

This warranty extends only to the first consumer purchaser, and is not transferable.

**HOW TO OBTAIN WARRANTY SERVICE OR OTHER INFORMATION?**

Contact your Motorola point of purchase.

**SOFTWARE COPYRIGHT NOTICE**

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## **PATENT NOTICE**

This product is covered by one or more of the following United States patents.

5896277 5894292 5864752 5699006 5742484  
D408396 D399821 D387758 D389158 5894592  
5893027 5789098 5734975 5861850 D395882  
D383745 D389827 D389139 5929825 5926514  
5953640 6071640 D413022 D416252 D416893  
D433001

## **EXPORT LAW ASSURANCES**

This product is controlled under the export regulations of the United States of America. The Governments of the United States of America may restrict the exportation or re-exportation of this product to certain destinations. For further information contact the U.S. Department of Commerce.

## ACCESSORIES

The following accessories parts are compatible with model number CP185.

| ANTENNAS             |   |
|----------------------|---|
| Motorola Part Number | Description                               |
| NAD6502_R            | VHF Heliflex Antenna, 146 – 174 Mhz       |
| PMAD4049_            | VHF Helical Antenna, 146 – 174 MHz        |
| NAE6483_R            | UHF Whip Antenna, 403 – 520 MHz (16.5 cm) |
| PMAE4016_            | UHF Whip Antenna, 403 – 520 MHz           |

| BATTERIES            |                                 |
|----------------------|---------------------------------|
| Motorola Part Number | Description                     |
| PMNN4080_R           | Li-Ion High Capacity – 2150 mAh |
| PMNN4081_R           | Li-Ion – 1500 mAh               |
| PMNN4082_R           | NiMH – 1300 mAh                 |

| <b>CHARGERS AND POWER ADAPTERS</b> |  |
|------------------------------------|--|
| <b>Motorola Part Number</b>        | <b>Description</b>   |
| PMLN5228_                          | Tri-Chem Single Unit Charger Base  |
| PMLN5398_                          | Single Unit Charger Base with US 2-Pin Switch Mode Power Supply                    |
| EPNN9288_                          | 90 – 264 V, Switch Mode Power Supply with North America/Latin America country plug |

| <b>AUDIO ACCESSORIES</b>    |  |
|-----------------------------|--|
| <b>Motorola Part Number</b> | <b>Description</b>   |
| <b>MAG ONE™ Branded</b>     |  |
| PMLN4442_                   | Earbud with In-Line Microphone/PTT/VOX Switch (MagOne)                       |
| PMLN4443_                   | Ear Receiver with In-Line Microphone/PTT/VOX Switch (MagOne)                 |
| PMLN4444_                   | Earset with Boom Microphone and In-Line PTT/VOX Switch (MagOne)              |
| PMLN4445_                   | Ultra-Light Headset with Boom Microphone and In-Line PTT/VOX Switch (MagOne) |
| PMMN4008_                   | Remote Speaker Microphone (MagOne)   |
| <b>MOTOROLA Branded</b>     |  |
| HMN9013_                    | Lightweight Single Muff Adjustable Headset with Swivel Boom Microphone       |
| HMN9754_                    | 2-wire Earpiece with Microphone and PTT Combined – Beige                     |
| PMLN4620_                   | Receive Only D-Style Earpiece (for PMMN4013 Remote Speaker Microphone)       |
| PMLN5001_                   | D-Style Earpiece with Microphone/PTT   |
| PMLN5003_                   | Retail Temple Transducer Headset   |

| AUDIO ACCESSORIES       |  |
|-------------------------|--|
| Motorola Part Number    | Description  |
| <b>MOTOROLA Branded</b> |  |
| PMMN4013_               | Remote Speaker Microphone with Ear Jack  |
| PMMN4029_               | Remote Speaker Microphone with IP57 Rating   |
| RLN5317_                | 2-wire Earpiece with Microphone and PTT Combined, Translucent Tube – Beige           |
| RLN5318_                | 2-wire Earpiece with Microphone and PTT Combined, Translucent Tube – Black           |
| RLN4895_                | 2-wire Earpiece with Microphone and PTT Combined – Black                             |
| RLN6230_                | High Noise Kit, Black (Includes Foam Earplugs with Acoustic Tube)                    |
| RLN6231_                | High Noise Kit, Beige (Includes Foam Earplugs with Acoustic Tube)                    |
| RLN6232_                | Low Noise Kit, Black (Includes Rubber Tip with Acoustic Tube)                        |
| RLN6241_                | Low Noise Kit, Beige (Includes Rubber Tip with Acoustic Tube)                        |
| RLN6242_                | Quick Disconnect Acoustic Tube   |
| RLN4941_                | Receive Only Earpiece with Translucent Tube (for PMMN4013 Remote Speaker Microphone) |

| AUDIO ACCESSORIES       |   |
|-------------------------|---|
| Motorola Part Number    | Description   |
| <b>MOTOROLA Branded</b> |   |
| WADN4190_               | Receive Only Flexible Earpiece (for PMMN4013 Remote Speaker Microphone) |
| AARLN4885_              | Receive Only Earbud (for PMMN4013 Remote Speaker Microphone)            |

| MISCELLANEOUS        |                                  |
|----------------------|----------------------------------|
| Motorola Part Number | Description                      |
| HLN9844_             | Spring Action Belt Clip (2 inch) |
| PMLN5334_            | Protective Leather Case          |

**Note:** Certain accessories may be or may not be available at the time of purchase. For latest information on accessories, contact your Motorola point of purchase or visit: <http://www.motorola.com/governmentandenterprise>.

# Notes



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