

# CLP Series Two-Way Radio™

## *User Guide*



Models CLP1010 and CLP1040

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# RADIO FREQUENCY (RF) EXPOSURE SAFETY STANDARDS

For a list of Motorola-approved antennas, batteries, and other accessories, visit the following website:  
[www.motorola.com/CLP](http://www.motorola.com/CLP)

## Product Safety and RF Exposure Compliance



Caution

Before using this product, read the operating instructions for safe usage contained in the Product Safety and RF Exposure booklet contained 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 Product Safety and RF Exposure booklet enclosed with your radio (Motorola Publication part number 6881095C98) to ensure compliance with RF energy exposure limits.

## FCC LICENSING INFORMATION

### INTERFERENCE INFORMATION

This device complies with Parts 90 and 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

The CLP Series radio operates on radio frequencies that are regulated by the Federal Communications Commission (FCC). To transmit on these frequencies, you are required to have a license issued by the FCC. Application is made available on FCC Form 601 and Schedules D, H, and Remittance Form 159.

To obtain these FCC forms, request document 000601 which includes all forms and instructions. If you wish to have the document faxed, mailed or have questions, use the following contact information.

<b>Faxed: Contact the Fax-On-Demand system at:</b>	<b>Mailed: Call the FCC forms hotline at:</b>	<b>For questions regarding FCC license, contact the FCC at:</b>
1-202-418-0177	1-800-418-FORM 1-800-418-3676	1-888-CALL-FCC 1-888-225-5322 Or: <a href="http://www.fcc.gov">http://www.fcc.gov</a>

Before filling out your application, you must decide which frequency(ies) you can operate on: “Radio Frequency and Code Charts” on page 32. For questions on determining the radio frequency, call Motorola Product Services at: **1-800-448-6686**.

Changes or modifications not expressly approved by Motorola may void the user’s authority granted by the FCC to operate this radio and should not be made. To comply with FCC requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services.

Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the FCC equipment authorization for this radio could violate FCC rules.

Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.



## INTRODUCTION

Thank you for purchasing a Motorola CLP Series Two-Way Radio™. Your radio is a product of Motorola's 80 plus years of experience as a world leader in designing and manufacturing communications equipment. The CLP Series radios provide cost-effective efficient communications for businesses such as retail stores, restaurants, hotels, and schools. Motorola professional two-way radios are the perfect communications solution for all of today's fast-paced industries. Please read this guide carefully so you know how to properly operate the radio before use.

## PACKAGE CONTENTS

Your product package contains the following products and manuals:

- CLP Series Two-way Radio™
- Swivel Belt Clip Holster
- Lithium Ion Battery and Battery Door
- Drop-In Tray Charger with Transformer
- Wired Audio Accessory
- User Quick Reference
- Warranty Card

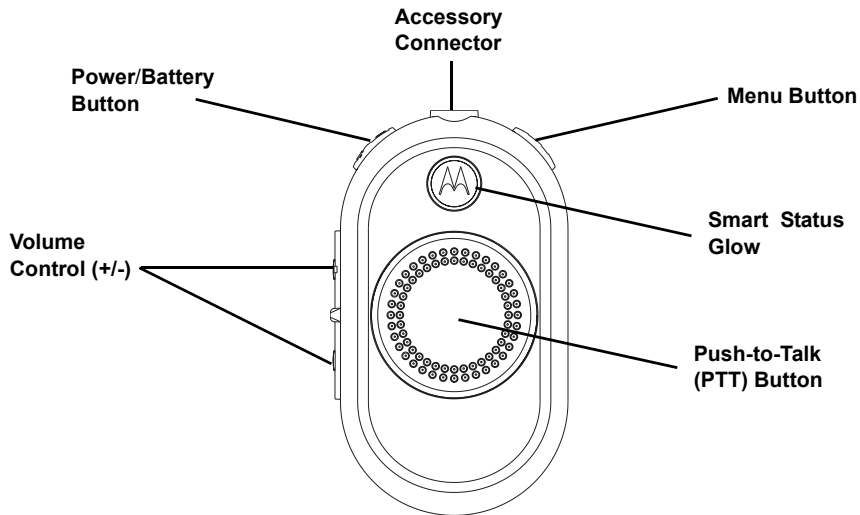
**For product information, visit us at:**  
**[www.motorola.com/CLP](http://www.motorola.com/CLP)**

For product-related questions, contact:

**1-800-448- 6686 in the USA**  
**1-866-390-6456 on your TTY (Text Telephone)**

# RADIO OVERVIEW

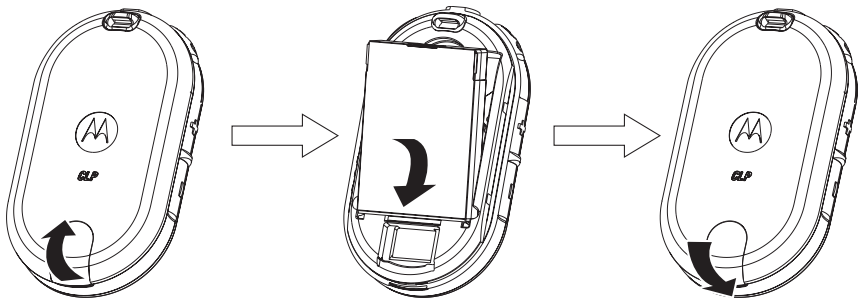
## RADIO CONTROLS



## GETTING STARTED

### INSTALL THE BATTERY

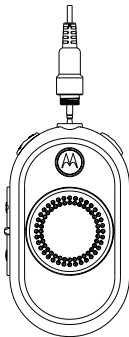
1. Push up the latch at the bottom of the battery door and lift the battery door off the radio.
2. Align the battery contacts with tabs in the battery compartment. Insert the contact side of the battery first, then press the battery down to secure in place.
3. Put the battery door back on the radio. Push down the latch to lock.



**Note:** The CLP Series radios' standard packaged models come with standard Lithium Ion battery and the standard Lithium Ion battery door. For option, customers can order Hi-capacity Lithium Ion battery (P/N HKNN4013) and the Hi-capacity Lithium Ion battery door (P/N HKLN4440).

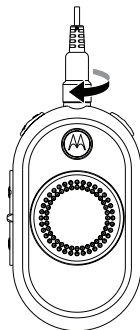
## Connecting an Audio Accessory

Connect the wired audio accessory or pair with a wireless accessory (select models only).



1. Turn the radio OFF.
2. Remove the accessory connector cover (applicable on bluetooth enabled models only).

3. Plug the audio accessory straight into the accessory connector on the radio. Screw the audio accessory plug into the connector until it is tight and fully engaged with the connector.



4. Turn the radio ON. Press either the Battery Status, Menu or Volume Control button to check for audio through the audio accessory.

**Note:** The CLP Series radios offer a variety of audio accessories. For detailed Audio Accessories List, please refer to [www.motorola.com/CLP](http://www.motorola.com/CLP) for information on approved accessories. Lower the radio volume BEFORE placing the audio accessory in or near your ear.

## Turning the Radio On and Off

- To turn the radio ON, press and hold the Power/Battery button until you hear a short tone and the Smart Status Glow lights up.
- To turn it OFF, press and hold the button until you hear a short tone and the Smart Status Glow (red) indicator blinks once.

## Adjusting the Volume

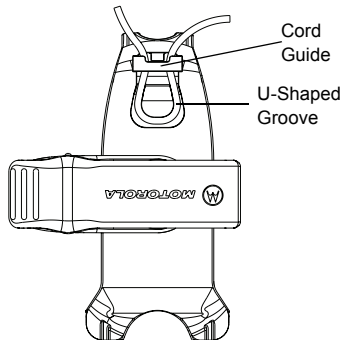
Turn the radio ON and set volume level by pressing volume control (+/- button). A total of 16 volume levels are available.

## Installing and Removing the Swivel Belt Clip Holster

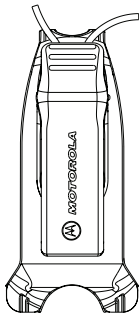
1. Slide the bottom of the radio into the holster.
2. Snap the top of the holster into the radio around the accessory connector.
3. To remove the holster, pull either the top or bottom tab(s) and pull the radio from the holster.

**Note:** When using a corded audio accessory, loop the cord into the recess in the rear of the holster for optimal plug retention.

4. Make a small loop in the cord. Pass the cord through the cord guide, nest the cord in the U-shaped groove. Pull tight to lock the cord in place.



5. Turn the belt clip to the position as needed.



**Note:** The CLP Series radios offer a variety of flexible carrying accessories. For detailed Carrying Accessories List, please refer to [www.motorola.com/CLP](http://www.motorola.com/CLP) for information on approved accessories.

## TRANSMITTING AND RECEIVING

1. To talk, press and hold the PTT button on the front of the radio (or on select wired audio accessories with an inline PTT). Speak clearly into the microphone on the audio accessory. When finished talking, release the PTT to listen.
2. To receive, listen through the earpiece at the volume level you have set. Press the PTT to respond.

**Note:** The CLP Series radios always require the use of an audio accessory with microphone and speaker.

**Table 1: Talk Range**

Industrial	Multi-Level
Inside steel/concrete industrial buildings	Inside Multi-Level Buildings
Up to 160,000 square feet	Up to 12 floors

## OPERATION WITH MENU SETTINGS

Press Menu button to navigate through the Menu settings. Voice Assisted Operation feature is available on selected models. At any time in Menu mode, short press PTT or wait 3 seconds to exit the menu.

HOW TO...	STEP 1	STEP 2
Change Channel	Press Menu button to navigate to Channel.	Press +/- button to change channel.
Enter Monitor Mode	Press Menu button to navigate to Monitor.	Press +/- button to activate or deactivate Monitor.
Enter Scan Mode	Press Menu button to navigate to Scan.	Press +/- button to activate or deactivate Scan.
Send Call Tone (enabled through CPS)	Press Menu button to navigate to Call Tone.	Press +/- button to send Call Tone.

**Quick Tip:** It is not necessary to wait for the voice prompt to be completed before continuing with next button press.






**Note:** For single channel models, only Monitor mode is available from Menu list. To activate, press and hold the Menu button; to deactivate, press and hold the Menu button again.

## Selecting a Channel

For CLP1040 multi-channel models only:

- When powered ON, press the Menu button, you will hear the voice prompt:
- [Color] “Channel” – [Channel#] – “To change” – “press +/-”
- Select the channel you want. The LED will reflect the color of the new channel. Press PTT button to confirm or it will be active after 3 second hang time.

**Table 2: Default Channel Settings for CPS**

CLP1010 Single-Channel Models			CLP1040 Multi-Channel Models		
Channel	LED Status	Color	Channel	LED Status	Color
1		Red	1		Red
			2		Green
			3		Orange
			4		Blue



## Monitoring a Channel

### *For CLP1010 single-channel models*

- To activate, press and hold the Menu button.
- To deactivate, press and hold the Menu button again.

### *For CLP1040 multi-channel models*

- To activate, press the Menu button to navigate to Monitor mode.
- When Monitor is OFF, you will hear the voice prompt: “Monitor” – “To activate” – “press +/-”.
- Press either “+/-” button to activate the Monitor; press either “+/-” button again to deactivate.
- When Monitor is ON, you will hear static if no activity is present or audio if channel activity is present.
- To engage the Monitor mode, enable Monitor via the menu and let the menu time out.
- To deactivate, press PTT during Monitor Menu mode.

## Scanning (\*)

(\*) For CLP1040 multi-channel models only

You can scan up to 4 channels. When the radio detects activity, it stops scanning and locks in on the active channel. This allows you to talk and listen to the person transmitting without changing channels.

- Press the Menu button to navigate to Scan mode.
- When Scan is OFF, you will hear the voice prompt: “Scan” – “To activate” – “press +/-”.
- Press either “+/-” button to activate the Scan; press either “+/-” button again to deactivate.
- When Scan is on, you will hear the voice prompt: “Scan” – “To deactivate” – “press +/-” button.

## Sending Call Tone (enabled through CPS)

(\*) For CLP1040 multi-channel models only

- Press the Menu button to navigate to Call Tone.
- Press either “+/-” button to transmit selected Call Tone.

**Note:** There are 4 Call Tones available.

## BATTERY AND CHARGER FEATURES

### BATTERY FEATURES

The CLP Series radio provides Lithium-Ion batteries that come in different capacities that will define the battery life.

#### About the Li-Ion Battery

The CLP Series radio comes equipped with a rechargeable Li-Ion battery. This battery should be charged before initial use to ensure optimum capacity and performance.

Battery life is determined by several factors. Among the more critical are the regular overcharge of batteries and the average depth of discharge with each cycle. Typically, the greater the overcharge and the deeper the average discharge, the fewer cycles a battery will last. For example, a battery which is overcharged and discharged 100% several times a day, lasts fewer cycles than a battery that receives less of an overcharge and is discharged to 50% per day. Further, a battery which receives minimal overcharging and averages only 25% discharge, lasts even longer.

Motorola batteries are designed specifically to be used with a Motorola charger and vice versa. Charging in non-Motorola equipment may lead to battery damage and void the battery warranty. The battery should be at about 77 °F (25 °C) (room temperature), whenever possible. Charging a cold battery (below 50 °F [10 °C]) may result in leakage of electrolyte and ultimately in failure of the battery. Charging a hot battery (above 95 °F [35 °C]) results in reduced discharge capacity, affecting the performance of the radio. Motorola rapid-rate battery chargers contain a temperature-sensing circuit to ensure that batteries are charged within the temperature limits stated above.

#### **Battery Life**

Based on 5% transmit, 5% receive, 90% standby (standard duty cycle):

Estimated Battery Life		
Charging Solution	Battery Type	
	Standard Li-Ion Battery	High Capacity Li-Ion Battery
Standard Charging Solution	12 hours	18 hours

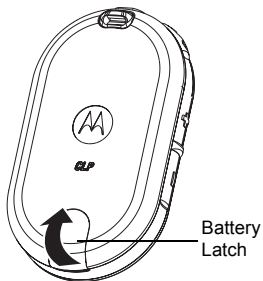
## Battery Recycling and Disposal

Li-Ion rechargeable batteries can be recycled. However, recycling facilities may not be available in all areas. Under various U.S. state laws and the laws of several other countries, batteries must be recycled and cannot be disposed of in landfills or incinerators. Contact your local waste management agency for specific requirements and information in your area. Motorola fully endorses and encourages the recycling of Li-Ion batteries. In the U.S. and Canada, Motorola participates in the nationwide Rechargeable Battery Recycling Corporation (RBRC) program for Li-Ion battery collection and recycling.

Many retailers and dealers participate in this program. For the location of the drop-off facility closest to you, access RBRC's Internet web site at: <http://www.call2recycle.org> or call: 1- 877-723-1297.

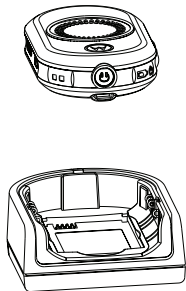
This internet site and telephone number also provides other useful information concerning recycling options for consumers, businesses and governmental agencies.

## Removing the Lithium-Ion (Li-Ion) Battery



1. Turn OFF the radio.
2. Push up the latch at the bottom of the battery door and lift the battery door off the radio.
3. Pull the battery away from the radio.

## Power Supply, Adapter and Drop-in Tray Charger



The radio is packaged with one Drop-in Tray Charger with transformer. For details, see "Chargers" Section on page 41.

## Charging the Battery

To charge the battery (with the radio attached):

1. Place it in a Motorola-approved Drop-in Tray Single Unit Charger or Drop-in Tray Multi Unit Charger.

**Note:** When acquiring additional chargers or power supplies, make sure you have similar drop-in tray chargers and power supplies sets. For part number details, refer to “Chargers” Section on page 41.

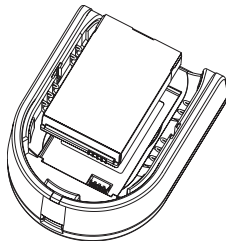
### Estimated Charging Time

The following table provides the estimated charging time of the battery.

Estimated Charging Time		
Charging Solution	Battery Type	
	Standard Li-Ion Battery	High Capacity Li-Ion Battery
Standard Charging Solution	2.5 hours	3.5 hours

For further details, see “Batteries” Section on page 41.

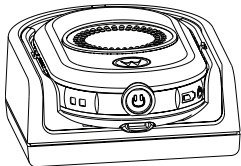
## Charging a Standalone Battery



To charge only the battery:

1. Insert the battery into the tray, with the inside surface of the battery facing the front of the charger, as shown.
2. Ensure the slots in the battery correctly engage in the charger.

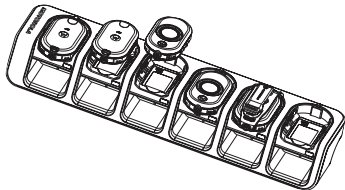
### Charging with the Drop-in Tray Single Unit Charger (SUC)



1. Place the drop-in tray charger on a flat surface.
2. Insert the connector of the power supply into the Micro USB port on the front of the drop-in tray charger.
3. Connect the correct power supply to a proper AC outlet.
4. Insert the radio into the tray, making sure the charging contacts on the charger are aligned with the contacts on the radio.

**Note:** When charging a battery attached to a radio, turn the radio OFF to ensure a full charge. The radio will fit in the charger with the holster attached when placed face down in the tray.

### Charging with the Drop-In Tray Multi-Unit Charger (Optional Accessory)



The Multi-Unit Charger (MUC) allows drop-in charging of up to 6 radios. Each of the 6 charging pockets can hold a radio (with battery installed). The Multi-Unit Charger provides pockets for headset storage.

1. Place the charger on a flat surface or mount it on the wall.
2. Insert the power cord plug into the jack on the MUC.
3. Plug the cord into an AC outlet and then into charger.
4. Turn the radio OFF.

**Note:** If the radio is ON while charging, it will take longer to fully charge.

5. Insert the radio (with battery installed) into the charging pocket.

**Note:** The radio will fit in the charger with the holster attached when placed face down in the tray. The battery can be charged by itself using the slot on the flat surface of the charging pocket.




### **Charging Status LEDs**

On the drop-in charger, the radio charging pocket has an LED Charger.

On the MUC, each of the 6 charging pockets has an LED. The LEDs are grouped into pairs to show which charging pockets are paired. The LED is red when the battery is charging. It turns to green once the battery is fully charged.





**Note:** This Multi Unit Charger allows you to clone up to 2 radios (2 Source radios and 2 Target radios). For more details, refer to "Radio Cloning" Section on page 21.

- For part number details, refer to the "Accessories" Section on page 41.

<b>Charger LED Indicator</b>			
<b>Status</b>	<b>LED Status</b>		<b>Comments</b>
Charging	Steady Red Indication		The charger is currently charging.
Charge Complete	Steady Green Indication		Battery is fully charged.
Battery Fault (*)	Blinking Red		Battery was faulty when inserted.
<p><b>Note:</b> The LED is red when the battery is charging. It turns to green once the battery is fully charged.</p> <p><b>Note:</b> (*) Re-seating the battery pack will likely correct this issue.</p>			

## Checking Battery Status

When powered on, short press and release the Power/Battery button, the Smart Status Glow and Voice Assisted Operation<sup>(\*)</sup> features will give you the battery status.

Battery Status		
Level	LED Status	Color
Battery Level High (70 – 100%)		Green
Battery Level Medium (30 – 70%)		Orange
Battery Level Low (10 – 30%)		Red
Battery Level Critical (0 – 10%)		Blinking Red

After the Smart Status Glow and Voice Assisted Operation<sup>(\*)</sup> features indicate the BATTERY STATUS, it will return to the current channel color.

**Note:** <sup>(\*)</sup> Voice Assisted Operation on select models only.

**Note:** For CLP1040 multi-channel models, there is a voice prompt through audio accessory.

For CLP1010 single-channel models, the radio generates alert-tones to indicate battery level.



## BATTERIES AND CHARGERS SAFETY INFORMATION

This document contains important safety and operating instructions. Read these instructions carefully and save them for future reference.

Before using the battery charger, read all the instructions and cautionary markings on

- the charger,
  - the battery, and
  - the radio using the battery
1. To reduce risk of injury, charge only the rechargeable Motorola-authorized batteries. Other batteries may explode, causing personal injury and damage.
  2. Use of accessories not recommended by Motorola may result in risk of fire, electric shock, or injury.

3. To reduce risk of damage to the electric plug and cord, pull by the plug rather than the cord when disconnecting the charger.
4. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in risk of fire and electric shock. If an extension cord must be used, make sure that the cord size is 18 AWG for lengths up to 6.5 feet (2.0 m), and 16 AWG for lengths up to 9.8 feet (3.0 m).
5. To reduce risk of fire, electric shock, or injury, do not operate the charger if it has been broken or damaged in any way. Take it to a qualified Motorola service representative.
6. Do not disassemble the charger; it is not repairable and replacement parts are not available. Disassembly of the charger may result in risk of electrical shock or fire.
7. To reduce risk of electric shock, unplug the charger from the AC outlet before attempting any maintenance or cleaning

## **OPERATIONAL SAFETY GUIDELINES**

- Turn the radio OFF when charging battery.
- The charger is not suitable for outdoor use. Use only in dry locations/conditions.
- Connect charger only to an appropriately fused and wired supply of the correct voltage (as specified on the product).
- Disconnect charger from line voltage by removing main plug.
- The outlet to which this equipment is connected should be nearby and easily accessible.
- Maximum ambient temperature around the power supply equipment must not exceed 40 °C (104 °F).
- Make sure that the cord is located where it will not be stepped on, tripped over, or subjected to water, damage, or stress.

# PROGRAMMING THE RADIO THROUGH CPS

## RADIO PROGRAMMING OVERVIEW

### Downloading the (Customer Programming Software) CPS

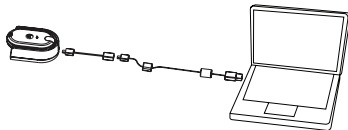
You can program or change features on your CLP radios by using the Computer Programming Software (CPS) and the CPS Programming Cable (\*). CPS software is available for free as web based downloadable software at: [www.motorola.com/CLP](http://www.motorola.com/CLP)

After downloading the CPS, install the software to your computer.

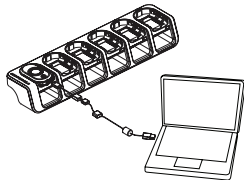
## Programming the Radio

To program the radio:

1. Connect the radio via the Drop-in Charger Tray or the Charging Pocket with "PROG" label on the Multi-Unit Charger and CPS Programming Cable.



**Programming the Radio through a Single Unit Charger**



**Programming the Radio through a Multi-Unit Charger**

2. Make sure the radio is turned ON.
3. Once the radio is connected, open the CPS and select "Read" on the toolbar to get the radio profile. The CPS allows the user to change settings, such as General, Audio, Menu, Channels, Scan List, as well as select frequencies, PL/DPL codes on each channel.
4. After you change the settings, press "Write" on the toolbar to save the settings.

For more information on the Computer Programming Software, please refer to Help menu on the CPS.

**Note:** (\*) CPS Programming Cable (P/N HKKN4025) is an accessory sold separately. Please contact your Motorola Point of Purchase for more information.

## Factory Default Settings

Your radio is programmed at the factory to the following settings:

CLP1010 1W UHF 1 CH Radios Default Settings - BRUS				
Channel #	Frequency #	Frequency Setting	Code Value (Hz)	Band width (kHz)
1	2	464.5500	67	12.5

CLP1040 1W UHF 4 CH Radios Default Settings - BRUS				
Channel #	Frequency #	Frequency Settings	Code Value (Hz)	Band width (kHz)
1	2	464.5500	67	12.5
2	8	467.9250	67	12.5
3	5	467.8500	67	12.5
4	6	467.8750	67	12.5

## RADIO CLONING

### CLONING RADIO SETTINGS

You can copy the CLP Series radio settings from one radio (the source) to a second radio using the CLP Series Single Unit Charger (SUC) Kit P/N HKPN4008 and CLP Series Cloning Cable Kit P/N HKKN4026 (optional accessory) or CLP Series Multi-Unit Charger (MUC) Kit P/N HKPN4007 (optional accessory).

A multi-channel radio can be cloned to a single-channel radio BUT only the first channel will be cloned. The Multi-Unit Charger (MUC) does not have to be plugged in for cloning, but both radios require charged batteries.

### CLONING INSTRUCTIONS

**Cloning Radios using the CLP Series Cloning Cable Kit P/N HKKN4026 (optional accessory)**



**Cloning the Radio through a Single Unit Charger**


**Source Radio:** Radio to be cloned

**Target Radio:** Radio to which the configuration of the "Source Radio" will be copied.

Before beginning the cloning process, make sure you have:

- A fully charged battery on each one of the radios
- Two CLP Series Single Unit Charger (SUC) Kits
- Both radios are turned OFF

1. Unplug any cables (power supply or USB cables) from the Single Unit Chargers.

2. Plug one side of the cloning cable microconnector to one Single Unit Charger. Plug the other end to the second Single Unit Charger.  
**Note:** During the cloning process no power is being applied to the Single Unit Charger. The batteries will not be charged. A data communication is being established between the two radios.
3. Turn ON the “Target Radio” and place it into one of the Single Unit Chargers.
4. On the “Source Radio”, power the radio following the sequence below:• Press and hold the Push-to-Talk (PTT) and the “-“Button simultaneously while turning the radio ON until you hear the Cloning Tone and Double Blinking Orange  on the Smart Status Glow.
5. Place the “Source Radio” in its Single Unit Charger with an Audio accessory, then press and release Menu Button to start the cloning process.
6. After cloning is completed, the “Source Radio” will sound either a “pass” tone (cloning was successful) or a “fail” tone (cloning process has failed). The pass tone sounds like a good key “chirp” whereas the “fail” tone sounds similar to a “bonk” tone. (A tone will be heard in no more than 5 seconds).
7. Once you have completed the cloning process, you should turn the radios “OFF” and “ON” to bring them to normal user mode (exit “clone” mode).

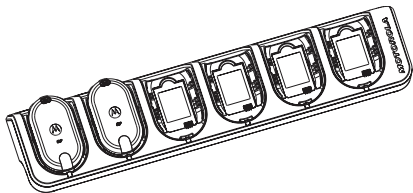
### ***What to do if cloning fails***

The radio will emit an audible “bonk” indicating that the cloning process has failed. In the event that cloning fails, try performing each of the following before trying to start the cloning process again.


1. Make sure that the radio batteries on both radios are fully charged.
2. Verify the cloning cable connection on both Single Unit Chargers.
3. Make sure that the battery is engaged properly on to the radio.
4. Make sure that there is no debris in the charging tray or on the radio contacts.
5. Verify that the source radio is in cloning mode.
6. Make sure that the radio to be cloned is turned ON.
7. Make sure that radios are both from the same type (same frequency band, same region and same transmission power).

**Note:** This cloning cable is designed to operate only with compatible Motorola Drop-in Tray Single Unit Charger. When ordering the cloning cable, please refer to CLP Series Cloning Cable Kit P/N HKKN4026. For details about accessories, refer to "Accessories" Section on page 41.

## Cloning Radios using the CLP Series Multi-Unit Charger (MUC) Kit P/N HKPN4007 (optional accessory)



### Cloning the Radio through a Multi-Unit Charger

1. To put the source radio into clone mode, press and hold PTT and the “-” button while turning the radio ON until you hear the Cloning Tone and Double Blinking Orange  on the Smart Status Glow.
2. Place the source radio into one of the charging pockets that has the “CLONE” label.
3. Turn the target radio ON and place it in the pairing charging pocket that has the “CLONE” label and start the cloning process.
4. Press the “Menu” button on the source radio to start the cloning process. The source radio generates the start clone tone.
5. Once the cloning is completed, turn the target radio OFF and back ON again in order to activate the radio.
6. To clone another radio, repeat steps 3, 4 and 5.
7. To exit clone mode on the source radio, turn the radio OFF.



## CLP REPEATER CAPABILITY: WORKING WITH RPX

### CLP REPEATER CAPABILITY

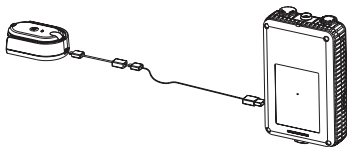
Use the Single Unit Charger or use the pocket with “PROG” label on the Multi-Unit Charger to clone the RPX.

**Note:** Connect the RDX Serial Clone Cable (P/N RLN6303) and the Mini-USB to the Micro-USB Adapter Cable (P/N SKN6252) in order to link the CLP and RPX units.

### INSTRUCTIONS

1. To put the CLP radio into clone mode, press and hold PTT and the “-” button while turning the radio ON until you hear the Cloning Tone and Blinking Orange 🌞 on the Smart Status Glow.

### *Programming the RPX through a Single Unit Charger*

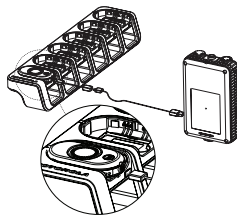


### Programming the RPX through a Single Unit Charger

1. Place the CLP radio into the charging pocket.
2. Connect the micro-USB plug of the micro-USB adapter cable with the RDX Serial Clone Cable into the micro-USB receptable charging pockets.
3. Connect the Mini-USB plug of the RDX Serial Clone Cable into the RPX Mini-USB receptable.

4. Press the “Menu” button on the CLP radio to start the cloning process.
5. Once the cloning is completed, turn the RPX OFF and back ON again in order to activate the radio.
6. To clone another RPX, repeat steps 3, 4 and 5.
7. To exit clone mode on the CLP radio, turn the radio OFF.

### ***Programming the RPX through a Multi-Unit Charger***



### **Programming the RPX through a Multi-Unit Charger**

1. Place the CLP radio into one of the charging pockets that has the “PROG” label indicated.
2. Connect the micro-USB plug of the micro-USB adapter cable with the RDX Serial Clone Cable into the micro-USB receptable charging pockets with the “PROG” label indicated.
3. Follow steps 4 through 7 under “Programming the RPX through a Single Unit Charger” on page 25.

## TROUBLESHOOTING

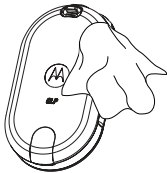
Symptom	Try this
No Power	Recharge or replace Li-Ion battery. Extreme operating temperatures affect battery life. Refer to “About the Li-Ion Battery” Section on page 10.
Hearing other noises or conversation on a channel	Confirm Interference Eliminator Code is set. Frequency or Interference Eliminator Code may be in use. Change settings: either change frequencies or codes on all radios. Make sure radio is at the right frequency and code when transmitting.
Message Scrambled	Scramble Code might be ON, and/or setting does not match other radios' settings. Use CPS to change settings.
Audio quality not good enough	Radio settings might not be matching up correctly. Double check frequencies, codes and bandwidths to ensure they are identical in all radios.

Symptom	Try this
Limited talk range	<p>Steel and/or concrete structures, heavy foliage, buildings or vehicles decrease range. Check for clear line of sight to improve transmission.</p> <p>Change location of radio. To increase range and coverage, you can either reduce obstructions or increase power.</p> <p>UHF radios provide greater coverage in industrial and commercial buildings.</p> <p>Increasing power provides greater signal range and increased penetration through obstructions.</p>
Message not transmitted/ received	<p>Make sure the PTT button is completely pressed when transmitting.</p> <p>Confirm that the radios have the same Channel, Frequency, Interference Eliminator Code and Scramble Code settings. Refer to “Transmitting and Receiving” Section on page 6.</p> <p>Recharge, replace and/or reposition batteries. Refer to “About the Li-Ion Battery” Section on page 10.</p> <p>Obstructions and operating indoors, or in vehicles, may interfere. Change location.</p> <p>Verify that the radio is not in Scan mode. Refer to “Scanning (*)” Section on page 9.</p>

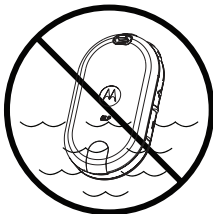
Symptom	Try this
Heavy static or interference	Radios are too close, they must be at least five feet apart. Radios are too far apart or obstacles are interfering with transmission.
Low batteries	Recharge or replace Li-Ion battery. Extreme operating temperatures affect battery life. Refer to “About the Li-Ion Battery” Section on page 10.
Drop-in Charger LED light does not blink	Check radio/battery is properly inserted and check battery/charger contacts to ensure they are clean and the charging pin is inserted correctly. Refer to “Charging the Battery” Section on page 13 and “Charger LED Indicator” Section on page 15.

Symptom	Try this
Cannot activate VOX	VOX feature might be OFF. Use the CPS to ensure that the VOX Sensitivity Level is not set to "0". Accessory not working or not compatible.
Battery doesn't charge although it has been placed in the drop-in charger for a while	Check drop-in charger is connected and correspond to a compatible power supply. Refer to "Charging the Battery" Section on page 13. Check the charger LEDs indicators to see if battery has a problem. Refer to "Charger LED Indicator" Section on page 15.
<b>Note:</b> Whenever a feature in your radio seems to not correspond to the default or preprogrammed values, check if your radio have been programmed using CPS with a customized profile.	

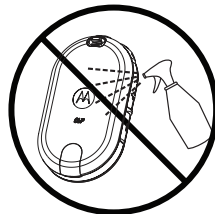
# USE AND CARE



Use a soft damp cloth to clean the exterior.

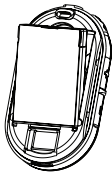


Do not immerse in water.



Do not use alcohol or cleaning solutions.

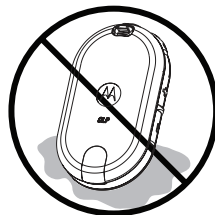
**If the portable is submerged in water...**



Turn OFF and remove batteries.



Dry with soft cloth.



Do not use until completely dry.

# RADIO FREQUENCY AND CODE CHARTS

These charts provide frequency information and are useful when using Motorola CLP Series Two-Way Radios with other business radios. Most of the frequency positions are the same as Spirit M, GT, S, XTN, RDX and CLS Series frequency positions (where applicable), the bandwidths are different.

**Table 3: CLP UHF Frequencies**

Freq. #	Frequency (MHz)	Band width (kHz)	Freq #	Frequency (MHz)	Band width (kHz)	Freq. #	Frequency (MHz)	Band width (kHz)	Freq. #	Frequency (MHz)	Band width (kHz)
1	464.5000	12.5	13	461.1375	12.5	25	462.8125	12.5	37	466.1125	12.5
2	464.5500	12.5	14	461.1625	12.5	26	462.8375	12.5	38	466.1375	12.5
3	467.7625	12.5	15	461.1875	12.5	27	462.8625	12.5	39	466.1625	12.5
4	467.8125	12.5	16	461.2125	12.5	28	462.8875	12.5	40	466.1875	12.5
5	467.8500	12.5	17	461.2375	12.5	29	462.9125	12.5	41	466.2125	12.5
6	467.8750	12.5	18	461.2625	12.5	30	464.4875	12.5	42	466.2375	12.5
7	467.9000	12.5	19	461.2875	12.5	31	464.8375	12.5	43	466.2625	12.5
8	467.9250	12.5	20	461.3125	12.5	32	464.5375	12.5	44	466.2825	12.5
9	461.0375	12.5	21	461.3175	12.5	33	464.5625	12.5	45	466.3125	12.5
10	461.0625	12.5	22	461.3625	12.5	34	466.0375	12.5	46	466.3375	12.5
11	461.0875	12.5	23	462.7625	12.5	35	466.0625	12.5	47	466.3625	12.5
12	461.1125	12.5	24	462.7875	12.5	36	466.0875	12.5	48	467.7875	12.5



### Table 3: CLP UHF Frequencies

Freq. #	Frequency (MHz)	Band width (kHz)	Freq #	Frequency (MHz)	Band width (kHz)	Freq. #	Frequency (MHz)	Band width (kHz)	Freq. #	Frequency (MHz)	Band width (kHz)
49	467.8375	12.5	60	462.5125	12.5	71	451.6375	12.5	81	468.2125	12.5
50	467.8625	12.5	61	467.1875	12.5	72	452.3125	12.5	82	468.2625	12.5
51	467.8875	12.5	62	467.4625	12.5	73	452.5375	12.5	83	468.3125	12.5
52	467.9125	12.5	63	467.4875	12.5	74	452.4125	12.5	84	468.3625	12.5
53	469.4875	12.5	64	467.5125	12.5	75	452.5125	12.5	85	468.4125	12.5
54	469.5125	12.5	65	451.1875	12.5	76	452.7625	12.5	86	468.4625	12.5
55	469.5375	12.5	66	451.2375	12.5	77	452.8265	12.5	87	468.5125	12.5
56	469.5625	12.5	67	451.2875	12.5	78	456.1875	12.5	88	468.5625	12.5
57	462.1875	12.5	68	451.3375	12.5	79	456.2375	12.5	89	468.6125	12.5
58	462.4625	12.5	69	451.4375	12.5	80	456.2875	12.5	90	468.6625	12.5
59	462.4875	12.5	70	451.5375	12.5						

**Table 4: CCTSS/DPL Interference Eliminator Codes**

CCTSS	Code	CCTSS	Code	DPL	Code	DPL	Code	DPL	Code	DPL	Code	DPL	Code
0	Disabled	20	131.8	39	23	59	134	79	306	99	503	119	734
1	67	21	136.5	40	25	60	143	80	311	100	506	120	743
2	71.9	22	141.3	41	26	61	152	81	315	101	516	121	754
3	74.4	23	146.2	42	31	62	155	82	331	102	532	<b>123</b>	<b>645</b>
4	77	24	151.4	43	32	63	156	83	343	103	546	<b>124</b>	<b>Cust</b>
5	79.7	25	156.7	44	43	64	162	84	346	104	565	<b>125</b>	<b>Cust</b>
6	82.5	26	162.2	45	47	65	165	85	351	105	606	<b>126</b>	<b>Cust</b>
7	85.4	27	167.9	46	51	66	172	86	364	106	612	<b>127</b>	<b>Cust</b>
8	88.5	28	173.8	47	54	67	174	87	365	107	624	<b>128</b>	<b>Cust</b>
9	91.5	29	179.9	48	65	68	205	88	371	108	627	<b>129</b>	<b>Cust</b>
10	94.8	30	186.2	49	71	69	223	89	411	109	631		
11	97.4	31	192.8	50	72	70	226	90	412	110	632		
12	100	32	203.5	51	73	71	243	91	413	111	654		
13	103.5	33	210.7	52	74	72	244	92	423	112	662		
14	107.2	34	218.1	53	114	73	245	93	431	113	664		
15	110.9	35	225.7	54	115	74	251	94	432	114	703		
16	114.8	36	233.6	55	116	75	261	95	445	115	712		
17	118.8	37	241.8	56	125	76	263	96	464	116	723		
18	123	38	250.3	57	131	77	265	97	465	117	731		
19	127.3	122	69.3	58	132	78	271	98	466	118	732		

DPL	Code (Inverted DPL)	DPL	Code (Inverted DPL)	DPL	Code (Inverted DPL)	DPL	Code (Inverted DPL)	DPL	Code (Inverted DPL)
130	39	147	56	164	73	181	90	198	107
131	40	148	57	165	74	182	91	199	108
132	41	149	58	166	75	183	92	200	109
133	42	150	59	167	76	184	93	201	110
134	43	151	60	168	77	185	94	202	111
135	44	152	61	169	78	186	95	203	112
136	45	153	62	170	79	187	96	204	113
137	46	154	63	171	80	188	97	205	114
138	47	155	64	172	81	189	98	206	115
139	48	156	65	173	82	190	99	207	116
140	49	157	66	174	83	191	100	208	117
141	50	158	67	175	84	192	101	209	118
142	51	159	68	176	85	193	102	210	119
143	52	160	69	177	86	194	103	211	120
144	53	161	70	178	87	195	104	212	121
145	54	162	71	179	88	196	105	213	123
146	55	163	72	180	89	197	106		

# MOTOROLA LIMITED WARRANTY FOR THE UNITED STATES

## What Does this Warranty Cover?

Subject to the exclusions contained below, Motorola, Inc. warrants its telephones, pagers, and consumer and business two-way radios (excluding commercial, government or industrial radios) that operate via Family Radio Service or General Mobile Radio Service, Motorola-branded or certified accessories sold for use with these Products ("Accessories") and Motorola software contained on CD-ROMs or other tangible media and sold for use with these Products ("Software") to be free from defects in materials and workmanship under normal consumer usage for the period(s) outlined below.

This limited warranty is a consumer's exclusive remedy, and applies as follows to new Motorola Products, Accessories and Software purchased by consumers in the United States, which are accompanied by this written warranty.

## Products and Accessories

Products Covered	Length of Coverage
<b>Products and Accessories</b> as defined above, unless otherwise provided for below.	<b>One (1) year</b> from the date of purchase by the first consumer purchaser of the product unless otherwise provided for below.
<b>Decorative Accessories and Cases.</b> Decorative covers, bezels, PhoneWrap™ covers and cases.	<b>Limited lifetime warranty</b> for the lifetime of ownership by the first consumer purchaser of the product.
<b>Business Two-way Radio Accessories</b>	<b>One (1) year</b> from the date of purchase by the first consumer purchaser of the product.
<b>Products and Accessories that are Repaired or Replaced.</b>	<b>The balance of the original warranty or for ninety (90) days</b> from the date returned to the consumer, whichever is longer.

## Exclusions

**Normal Wear and Tear.** Periodic maintenance, repair and replacement of parts due to normal wear and tear are excluded from coverage.

**Batteries.** Only batteries whose fully charged capacity falls below 80 % of their rated capacity and batteries that leak are covered by this limited warranty.

**Abuse & Misuse.** Defects or damage that result from: (a) improper operation, storage, misuse or abuse, accident or neglect, such as physical damage (cracks, scratches, etc.) to the surface of the product resulting from misuse; (b) contact with liquid, water, rain, extreme humidity or heavy perspiration, sand, dirt or the like, extreme heat, or food; (c) use of the Products or Accessories for commercial purposes or subjecting the Product or Accessory to abnormal usage or conditions; or (d) other acts which are not the fault of Motorola, are excluded from coverage.

## Use of Non-Motorola Products and

**Accessories.** Defects or damage that result from the use of Non-Motorola branded or certified Products, Accessories, Software or other peripheral equipment are excluded from coverage.

**Unauthorized Service or Modification.** Defects or damages resulting from service, testing, adjustment, installation, maintenance, alteration, or modification in any way by someone other than Motorola, or its authorized service centers, are excluded from coverage.

**Altered Products.** Products or Accessories with (a) serial numbers or date tags that have been removed, altered or obliterated; (b) broken seals or that show evidence of tampering; (c) mismatched board serial numbers; or (d) nonconforming or non-Motorola housings, or parts, are excluded from coverage.

**Communication Services.** Defects, damages, or the failure of Products, Accessories or Software due to any communication service or signal you may subscribe to or use with the Products Accessories or Software is excluded from coverage.

## Software

Products Covered	Length of Coverage
<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).	<b>Ninety (90) days</b> from the date of purchase.

## 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.

## WHAT WE WILL DO TO CORRECT WARRANTY PROBLEMS

At no charge to you, we have the option to repair or replace the Products or software that do not conform to the warranty, or to refund the Products’ purchase price. We may use functionally equivalent reconditioned/refurbished/pre-owned or new Products or parts. No software updates are provided.

## HOW TO OBTAIN WARRANTY SERVICE OR OTHER INFORMATION?

Contact your Motorola point of purchase.

Please call:

1-800-448- 6686 in the USA

1-866-522-5210 on your TTY (Text Telephone)

You will receive instructions on how to ship the Products to Motorola. You must ship the Products to us with freight, duties and insurance prepaid.

Along with the Products you must include:

- (a) a copy of your receipt, bill of sale or other comparable proof of purchase;
- (b) a written description of the problem;
- (c) the name of your service provider (if this Product requires subscription service);
- (d) the name and location of the installation facility (if applicable) and, most importantly;
- (e) your address and telephone number. If requested, you must also return all detachable parts such as antennas, batteries and chargers.

### **RETAIN YOUR ORIGINAL PROOF OF PURCHASE**

We will ship repaired or replacement Products at our expense for the freight and insurance, but at your expense for any duties. If additional information is needed, please contact us at the telephone number listed above.

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## ACCESSORIES

### BATTERIES

Part No.	Description
HKNN4013_	CLP Series High Capacity Li-Ion Battery Kit
HKNN4014_	CLP Series Standard Li-Ion Battery Kit
HKLN4440_	CLP High Capacity Li-Ion Battery Door Kit
HKLN4441_	CLP Standard Li-Ion Battery Door Kit

### CARRY ACCESSORIES

Part No.	Description
HKLN4433_	CLP Series Magnetic Case (*)
HKLN4434_	CLP Series Lanyard (*)
HKLN4438_	CLP Series Swivel Belt Clip Holster

### CHARGERS

Part No.	Description
HKPN4007_	CLP Series Multi Unit Charger (MUC) Kit
HKPN4008_	CLP Series Single Unit Charger (SUC) Kit

### PROGRAMMING CABLES

Part No.	Description
HKKN4025_	CLP Series CPS Cable Kit
HKKN4026_	CLP Series Cloning Cable Kit
RLN6303_	RDX Serial Clone Cable
SKN6252_	Mini-USB to the Micro-USB Adapter Cable

**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: [www.motorola.com/CLP](http://www.motorola.com/CLP)

For product-related questions, contact:

**1-800-448- 6686 in the USA**

**1-866-390-6456 on your TTY (Text Telephone)**

**Notes:**





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