

[Manuals.plus](#) /

› [Motorola](#) /

› Motorola CP200d UHF Two-Way Radio User Manual

Motorola CP200d

Motorola CP200d UHF Two-Way Radio User Manual

Model: CP200d

1. INTRODUCTION

This manual provides essential instructions for the safe and efficient operation of your Motorola CP200d UHF Two-Way Radio. Please read this manual thoroughly before using the device to ensure proper functionality and to prevent damage.





Image 1.1: Two Motorola CP200d UHF Two-Way Radios. These radios are designed for reliable communication in various professional environments.

2. IMPORTANT SAFETY INFORMATION

Always observe the following safety precautions to reduce the risk of fire, electric shock, injury, or damage to your radio.

- Do not operate the radio in explosive atmospheres (e.g., flammable gases, dust particles, metallic powders).
- Do not attempt to disassemble or modify the radio. Servicing should only be performed by qualified personnel.
- Use only Motorola-approved batteries and chargers.
- Keep the radio away from extreme temperatures and direct sunlight.
- Avoid exposing the radio to water or other liquids, unless specifically designed for such conditions (IP54 rated for dust and splash resistance).

3. PACKAGE CONTENTS

Verify that your package contains the following items:

- Motorola CP200d Two-Way Radio (Quantity: 2)
- Antenna (Quantity: 2)
- Rechargeable Lithium-Ion Battery (Quantity: 2)
- Belt Clip (Quantity: 2)

- Charging Unit (Quantity: 2)
- User Manual (This document)

4. PRODUCT OVERVIEW

The Motorola CP200d is a rugged, portable two-way radio designed for reliable communication. It supports both analog and digital modes, offering enhanced battery life, capacity, and audio quality.





Image 4.1: Front view of the Motorola CP200d radio, showing the speaker grille, microphone, and Motorola logo.

Key Features:

- Analog / Digital Voice Communications
- Digital Mobile Radio (DMR) Standards Compliant
- IP54 Rated for dust and splash resistance
- UHF Frequency Range: 403-470MHz
- Up to 18.5 Hours of Battery Life (Digital Mode)
- 16 Channels

5. SETUP

5.1. Battery Installation

1. Align the battery with the grooves on the back of the radio.
2. Slide the battery upwards until it clicks into place.
3. Ensure the battery latch is securely fastened.



Image 5.1: Back view of the Motorola CP200d radio, showing the battery contacts and attachment points.

5.2. Antenna Attachment

1. Screw the antenna into the connector on the top of the radio.

2. Turn clockwise until finger-tight. Do not overtighten.

5.3. Charging the Battery

1. Place the radio with the battery attached into the charging unit.
2. Ensure the charging contacts on the radio align with those on the charger.
3. The charger's LED indicator will show the charging status (e.g., red for charging, green for fully charged).
4. A full charge typically takes several hours. Refer to the charger's specific instructions for details.

6. OPERATING THE RADIO

6.1. Powering On/Off and Volume Control

1. To power on the radio, rotate the **On/Off/Volume Control knob** (located on the top of the radio) clockwise until you hear a click.
2. Continue rotating the knob clockwise to increase the volume, and counter-clockwise to decrease it.
3. To power off, rotate the knob counter-clockwise until it clicks.



Image 6.1: Top view of the Motorola CP200d radio, highlighting the On/Off/Volume control and the Channel Selector knob.

6.2. Channel Selection

The CP200d has 16 channels. To select a channel:

- Rotate the **Channel Selector knob** (the larger knob on the top of the radio) to choose the desired channel number.
- Ensure all radios in your group are set to the same channel for communication.

6.3. Transmitting and Receiving

1. To transmit, press and hold the **Push-To-Talk (PTT) button** on the side of the radio.
2. Speak clearly into the microphone, holding the radio approximately 1-2 inches from your mouth.
3. Release the PTT button to stop transmitting and listen for a response.

4. When receiving, the radio's speaker will output the incoming audio.

6.4. Digital and Analog Modes

The CP200d can operate in both digital and analog modes. This allows for seamless integration into existing communication systems and a gradual migration to digital technology. The mode is typically pre-programmed per channel. Consult your system administrator for channel mode configurations.

7. MAINTENANCE

7.1. Cleaning the Radio

- Wipe the radio's exterior with a soft, damp cloth.
- Do not use harsh chemicals, solvents, or abrasive cleaners.
- Ensure the radio is powered off and the battery is removed before cleaning.

7.2. Battery Care

- Charge batteries fully before first use.
- Avoid overcharging or completely draining the battery frequently to prolong its lifespan.
- Store batteries in a cool, dry place when not in use.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Radio does not power on.	Battery is not installed correctly or is discharged.	Ensure battery is properly installed. Charge the battery.
Cannot transmit or receive.	Incorrect channel selected, out of range, or antenna not attached.	Verify channel selection. Move closer to other radios. Check antenna connection.
Poor audio quality.	Low battery, interference, or radio too far from mouth during transmission.	Charge battery. Move away from sources of interference. Speak clearly into microphone.

If the problem persists after attempting these solutions, please contact Motorola customer support.

9. SPECIFICATIONS

The following table outlines the general specifications for the Motorola CP200d UHF Two-Way Radio:

Feature	Specification
Brand	Motorola
Model Number	CP200d
Frequency Range	UHF: 403-470MHz
Number of Channels	16

Feature	Specification
Power Output	1W / 4W (selectable)
Battery Type	Lithium Ion
Battery Life (Digital)	Up to 18.5 Hours
IP Rating	IP54 (Dust and Splash Resistant)
Dimensions (H x W x D)	5 x 2.4 x 1.8 inches (approx.)
Weight (with battery)	1.52 pounds (approx.)
Operating Voltage	3.7 Volts

Note: Specifications are subject to change without notice. All listed specifications are typical.

PRODUCT SPEC SHEET
MOTOTRBO™ CP200d™ PORTABLE RADIOS

GENERAL SPECIFICATIONS		
	CP200d	
	VHF	UHF BAND 1
Channel Capacity	16	
Typical RF Output		
Low Power	1 W	1 W
High Power	5 W	4 W
Frequency	136-174 MHz	403-470 MHz
Radio Dimensions (H x W x D) with battery:		
NiMH 1400mAh	5.0 x 2.4 x 1.7 in (127.7 x 61.5 x 42.0 mm)	
Slim Li-Ion 1600mAh	5.0 x 2.4 x 1.5 in (127.7 x 61.5 x 39.0 mm)	
Li-Ion 2200mAh	5.0 x 2.4 x 1.8 in (127.7 x 61.5 x 44.0 mm)	
Weight with battery:		
NiMH 1400mAh	14.3 oz (406 g)	
Slim Li-Ion 1600mAh	12.1 oz (341 g)	
Li-Ion 2200mAh	12.2 oz (346 g)	
Power Supply	7.5V (Nominal)	
FCC Description	AB299FT3092	AB299FT4094
IC Description	109AB-99FT3092	109AB-99FT4094
BATTERY		
Average battery life at 5/5/90 duty cycle with carrier squelch and transmitter in high power.*		
NiMH (1400 mAh) Battery	Analog: 9 hrs / Digital: 11.5 hrs	
Li-Ion Slim (1600 mAh) Battery	Analog: 10.5 hrs / Digital: 13.5 hrs	
High Cap Li-Ion (2200 mAh) Battery	Analog: 14.5 hrs / Digital: 18.5 hrs	
RECEIVER		
Frequency	136-174 MHz	403-470 MHz
Channel Spacing	12.5 kHz / 25 kHz ²	
Frequency Stability (-30°C, +60°C, +25°C Ref)	±0.5 ppm	
Analog Sensitivity (12 dB SINAD)	0.3 µV / 0.22 µV (typical)	
Digital Sensitivity (5% BER)	0.25 µV / 0.19 µV (typical)	
Intermodulation (TIA603D)	70 dB	
Adjacent Channel Selectivity (TIA603D)	45 dB @ 12.5 kHz / 70 dB @ 25 kHz ²	
Spurious Rejection (TIA603D)	70 dB	
Rated Audio	0.5 W (Internal)	
Audio Distortion @ Rated Audio	5% (3% typical)	
Hum and Noise	40 dB @ 12.5 kHz / -45 dB @ 25 kHz ²	
Audio Response	TIA603D	
Conducted Spurious Emissions (TIA603D)	-57 dBm	
TRANSMITTER		
Frequency	136-174 MHz	403-470 MHz
Channel Spacing	12.5 kHz / 25 kHz ²	
Frequency Stability (-30°C, +60°C, +25°C Ref)	±0.5 ppm	
Low Power Output	1 W	1 W
High Power Output	5 W	4 W
Modulation Limiting	±2.5 kHz @ 12.5 kHz / ±5.0 kHz @ 25 kHz ²	
FM Hum and Noise	40 dB @ 12.5 kHz / -45 dB @ 25 kHz ²	
Conducted / Radiated Emission	-36 dBm < 1 GHz / -30 dBm > 1 GHz	
Adjacent Channel Power	60 dB @ 12.5 kHz / 70 dB @ 25 kHz ²	
Audio Response	TIA603D	
Audio Distortion	3% (typical)	
4FSK Digital Modulation	12.5 kHz Data: 7K60F1D and 7K60F3D 12.5 kHz Voice: 7K60F1E and 7K60F3E Combination of 12.5 kHz Voice and Data: 7K60F1W	
Digital Encoder Type	AMBE-42™	
Digital Protocol	ETS/TS 102 361-1, -2, -3	

* Actual battery runtime observed may vary.
² 25 kHz may not be available in the U.S. for Part 90 operation due to the FCC's Narrowbanding requirements.
 Specifications subject to change without notice. All specifications shown are typical.



Image 9.1: Excerpt from the product specification sheet detailing general specifications for the CP200d radio.

10. WARRANTY AND SUPPORT

10.1. Warranty Information

Your Motorola CP200d Two-Way Radio comes with a **2-Year Warranty** from an Authorized Motorola Dealer. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

For detailed warranty terms and conditions, please refer to the warranty card included with your product or visit the official Motorola website.

10.2. Customer Support

For technical assistance, troubleshooting beyond this manual, or warranty service, please contact Motorola customer support or your authorized dealer.

You can find contact information on the official Motorola website: www.motorola.com

© 2023 Motorola. All rights reserved. Motorola and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

<https://manuals.plus/asin/B0788TV8KF>

More documents and user manuals: <https://manuals.plus/>