CP200 Series
Portable Two-way Radios

CP200
CP200 XLS – Limited Keypad
CP200 XLS – Full Keypad
Motorola—a name you know and trust.

Motorola is a company of firsts with a rich heritage of innovation. We continue to invent what’s next—connecting people, delivering mobility and making technology personal. Whether you need a simple yet reliable communication solution or a solution with enhanced functionality to organize multiple work groups, the CP200 Series of two-way radios help keep you and your team working efficiently. Featuring a lightweight, ergonomic design, powerful audio output and operation on both conventional and LTR trunking systems, the CP200 Series portable two-way radios help keep your work force connected. The result—increased productivity for your business.

Exceptional Durability
With superb durability, Motorola’s radios are built to last. Motorola’s rugged and reliable radios, undergo rigorous testing in the design process. We use U.S. Military Standards and Accelerated Life Testing, so you can be assured Motorola radios will hold up under demanding conditions. These tests are designed to simulate very harsh environments, including:

- Rain—Steady rainfall and wind for 30 minutes on every surface.
- Salt Fog—48 hours of exposure to an atomized salt solution.
- Dust—6 hours of blowing dust on all surfaces.
- Vibration—Up to 9 hours of exposure to vibration that simulates the rigors a radio could undergo while being transported.
- Shock—18 shocks with a minimum G force of 40 Gs each.

Service Offerings
Even with the quality you have come to expect from Motorola, the every day use of your radios requires on-going maintenance to help ensure your radios are operating at peak performance. Managing the in-house repair and maintenance of your subscriber radios takes a dedicated staff of technicians, as well as an ongoing investment in diagnostic equipment, repair tools, and the technical training to keep up to speed on the latest technology. Motorola has made that investment and can help you easily and cost effectively keep your radios in top operating condition to ensure optimal efficiency and productivity. You can rely on Motorola to support your radio system with these Subscriber Repair service offerings:

- **Repair Service Advantage (RSA)**
  Repair Service Advantage is a post-warranty service offering that extends the service coverage of Motorola subscriber portable or mobile radios. RSA can be purchased as an option to new radio purchases and is available in 1, 2 or 3-year increments. (US only)

- **Extended Warranty**
  In addition to the 2-year standard warranty, Extended Warranty is available for a total of 3 or 5 year coverage. (Canada only)
The design and simple operation of the CP200 portable two-way radio makes it ideal for education, hospitality, retail, manufacturing and security organizations. This radio features a large, textured push-to-talk button, X-Pand™ technology for crisp, clear audio and two programmable buttons for quick access to frequently used features—all in a lightweight, durable design.

Features

**CP200 Portable:**

- 4/16 Conventional Channels
- Large Rotary Channel Selector
- Changes channels quickly and easily
- Rotary On/Off and Volume Control
- Tricolor LED
- Indicates radio status and battery levels
- Accessory Connector
- Convenient access for audio accessories
- 3 Inch Spring Action Belt Clip
- Attaches radio firmly to belt
- Rugged, Die-Cast Chassis
- With polycarbonate housing for greater protection
- Large, Textured Push-to-Talk Button
- Easy to find and use, even when wearing gloves
- Two Programmable Option Buttons
- Supports your choice of up to four product features
- Privacy Codes Include:
  - 42 standard TPL codes
  - 84 standard DPL codes
  - Non-standard codes
- System Scan and Auto Scan
- Single Priority Scan
- Frequently scans higher priority channel
- Battery Latch Lock
- Secures battery
- Quik-Call II™ Signaling
- Call Alert
- Selective Call
- MDC 1200 Signaling
- Selective Radio Inhibit
- Radio Check
- Selective Inhibit
- Push-to-Talk ID
- DTMF Signaling
- DTMF Push-to-Talk ID
- 2-year Standard Warranty

**Programmable Features:** Choose up to 4

- Sticky Monitor/Monitor
- VOX
- Power Level
- Repeater/Talk Around
- Squelch
- Scan
- Nuisance Channel Delete

All CP200 models include:

- Li-Ion 2250 mAh Battery
- Rapid Rate Charger
- Antenna – VHF Heliflex or UHF Whip
- 3 Inch Belt Clip
- Safety and Warranty Booklet
- 2-Year Warranty
The expanded features of the CP200·XLS portable two-way radio makes it a perfect fit for education, hospitality, retail, manufacturing and security organizations who need additional capabilities and capacity to manage a large workforce. Featuring both conventional and LTR® trunking capability, the CP200·XLS enables you to efficiently organize your workforce. With both a limited keypad and full keypad model, the CP200·XLS also features an 8 character alpha-numeric display, four programmable buttons for quick access to up to eight programmable features and X-Pand™ technology for crisp, clear audio—all in a lightweight, durable design.
All CP200 XLS portable models include:
- Li-Ion 2250 mAh Battery
- Rapid Rate Charger
- Antenna – VHF Heliflex or UHF Whip
- 3 Inch Belt Clip
- Quick Reference/Safety and Warranty Guide
- 2-Year Warranty

Features

CP200 XLS Limited and Full Keypad Portables:

- 128 Conventional Channels
- Up to 100 LTR Talkgroups
- Up to 10 Sites and 100 Talkgroups in LTR
- Mixed Assignment of Conventional Personalities and LTR Talkgroups
- Up to 20 Repeaters per Site in LTR
- Up to 4 Universal IDs per System in LTR
- Up to 40 Universal IDs per Radio in LTR
- Up to 8 Programmable Features
- Supports up to 16 Scan Lists of up to 16 Channels Per List – Limited Keypad only
- User-Editable Standard TPL/DPL Codes
- User-Editable Scan List
- Lights On/Off
- Keypad and display backlights

Programmable Features: Choose up to 8

- Menu Mode
  Access to the radio menu and the ability to select a menu option
- Monitor
  Monitor radio traffic
- Repeater/Talkaround
  Toggle between using the repeater or transmitting directly to another radio
- Revert Memory Channel
  Instant access to the home channel/talkgroup
- Store Memory Channel
  Store current channel/talkgroup to the home channel/talkgroup
- Home Revert Auto Key
  Keys up the radio and transmits an MDC PTT ID (LTR only)
- Voice Operated Transmission (VOX)
  Hands-free operation with an audio accessory
- Tones On/Off
- Call Tone Tagging
  Tag a special tone for a particular call
- Quik-Call II™ Signaling Includes:
  Selective Call Encode: Calls a specific group or individual
  Call Alert Encode: Notifies a specific group/individual with an alert tone and lighted LED
- DTMF Signaling Includes:
  Selective Call/Call Alert Encode/Decode
- LTR Trunking Signaling Features:
  MDC 1200 Signaling
  PTT-ID Encode
  PTT-ID Decode
  Radio Check Decode
- Keypad Lock/Unlock
  Lock/unlock keypad to prevent unauthorized usage
- Radio Call
  Initiate Quik-Call II and/or DTMF Call Alert or Selective Call Encode from a call list
- Scan/Nuisance Channel/Talkgroup Delete
  Initiate or stop a scan and delete a nuisance channel/talkgroup while scanning
- Edit Scan List
  Add, delete or prioritize channels/talkgroups
- Phone Mode
  Place and receive telephone calls through the repeater
- Escalert
  Increase the volume of the alarm tones when a radio call is not answered
- Squelch
  Toggle squelch level between tight and normal squelch

Selective Radio Inhibit Decode
Data-Operated Squelch (DOS)
Pre-Time

The Full Keypad model has all of the same regular features as the Limited Keypad model plus the following:

- Dial Phone Numbers
- Manual Access Repeater
  Send DTMF tones to repeater
- User-Editable Phone List
- Speed Dial for Radio Call Encode

- Power Level
  Change transmit power between high and low power
- Lights
  Switch keypad and display backlights on or off

The Full Keypad model has all of the same programmable features as the Limited Keypad model plus the following:

- Speed Dial
- DTMF (Full-Keypad) Specific Features
  DTMF Last Number Redial in Phone Mode
  Auto DTMF Access/De-access Code
  Manual Entry of DTMF Access/De-access Code
Motorola Original® accessories provide a custom communication solution.

Each Motorola Original accessory is performance-matched specifically to your CP200 and CP200-XLS radios; designed, built and tested to meet the same quality standards. They provide enhanced functionality, and exceptional reliability in real-life usage.

Audio Solutions
Earpieces and lightweight headsets provide comfortable and easy-to-wear solutions for long shifts—common in retail or hospitality environments. Temple Transducers are an innovative accessory that allows easy radio communication without blocking your external environment sounds. Medium-weight headsets provide durability and protection in more rugged and noisy environments. Surveillance Kits and the Ear Microphone System provide discreet options for security teams. Mag One™ by Motorola accessories are a cost-effective solution for light-duty users.

Batteries
NiCD and NiMH batteries perform in more rugged environments, while Li-ion batteries provide a lightweight battery solution. For longer shifts or unusually heavy use, a high capacity Li-ion battery will provide extended talk time.

Chargers
Rapid and slow-rate chargers are available to meet specific charging needs. The rapid-rate charger will charge batteries within three hours, while the 10-hour charger can be used when overnight charging is convenient. A rapid-rate, multi-unit charger can charge up to six batteries at one time, while the multi-unit charger conversion kit allows you to convert your single-unit chargers into an efficient, cost-effective multi-unit charging station.

Carrying Accessories
You’d be surprised how much time can be saved when each user’s radio is always in the same place—made easy by a versatile selection of carry accessories. Leather and nylon carry cases provide protection in rugged environments and are available in different sizes to support non-display and keypad models. Chest packs and RadioPAks™ provide additional pouches for other on-the-job necessities.

For a complete listing of Motorola Original accessories and part numbers, please see the Accessory and Battery Catalog (RC-3-1008).

*Radio accessories are covered by Motorola’s One-year Limited Accessory Warranty.
### GENERAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>CP200 VHF</th>
<th>CP200 UHF</th>
<th>CP200 XLS VHF</th>
<th>CP200 XLS UHF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>136-162 MHz</td>
<td>403-440 MHz</td>
<td>136-162 MHz</td>
</tr>
<tr>
<td>Channel Capacity</td>
<td>4 or 16 Channels</td>
<td>128 Channels</td>
<td>4 or 16 Channels</td>
</tr>
<tr>
<td>Power Supply</td>
<td>7.5 Volts ± 20%</td>
<td>7.5 Volts ± 20%</td>
<td>7.5 Volts ± 20%</td>
</tr>
</tbody>
</table>

### RECEIVER SPECIFICATIONS

<table>
<thead>
<tr>
<th>CP200 VHF</th>
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<th>CP200 XLS VHF</th>
<th>CP200 XLS UHF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>12.5 kHz</td>
<td>20/25/30 kHz</td>
<td>12.5 kHz</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>0.25 μV</td>
<td>0.25 μV</td>
<td>0.25 μV</td>
</tr>
<tr>
<td>Intermodulation</td>
<td>-70 dB</td>
<td>-70 dB</td>
<td>-70 dB</td>
</tr>
<tr>
<td>Frequency Stability</td>
<td>0.00025%</td>
<td>0.00025%</td>
<td>0.00025%</td>
</tr>
<tr>
<td>Spurious Rejection</td>
<td>-75 dB</td>
<td>-75 dB</td>
<td>-75 dB</td>
</tr>
<tr>
<td>Audio Output</td>
<td>&lt; 5% Distortion</td>
<td>&lt; 5% Distortion</td>
<td>&lt; 5% Distortion</td>
</tr>
<tr>
<td>RF Output</td>
<td>1W</td>
<td>5W</td>
<td>1W</td>
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### TRANSMITTER SPECIFICATIONS

<table>
<thead>
<tr>
<th>CP200 VHF</th>
<th>CP200 UHF</th>
<th>CP200 XLS VHF</th>
<th>CP200 XLS UHF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>136-162 MHz</td>
<td>403-440 MHz</td>
<td>136-162 MHz</td>
</tr>
<tr>
<td>Channel Spacing</td>
<td>125 kHz</td>
<td>125 kHz</td>
<td>125 kHz</td>
</tr>
<tr>
<td>Audio Response</td>
<td>-36 dBm &lt; 1 GHz, -30 dBm &gt; 1 GHz</td>
<td>-36 dBm &lt; 1 GHz, -30 dBm &gt; 1 GHz</td>
<td>-36 dBm &lt; 1 GHz, -30 dBm &gt; 1 GHz</td>
</tr>
<tr>
<td>FM Noise</td>
<td>-40 dB (12.5 kHz)</td>
<td>-40 dB (12.5 kHz)</td>
<td>-40 dB (12.5 kHz)</td>
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</tbody>
</table>

### PORTABLE MILITARY STANDARDS 810 C, D, E and F

<table>
<thead>
<tr>
<th>MIL-STD 810C</th>
<th>MIL-STD 810D</th>
<th>MIL-STD 810E</th>
<th>MIL-STD 810F</th>
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</thead>
<tbody>
<tr>
<td>Low Pressure</td>
<td>Method</td>
<td>Method</td>
<td>Method</td>
</tr>
<tr>
<td>High Pressure</td>
<td>I, II</td>
<td>I, II</td>
<td>I, II</td>
</tr>
<tr>
<td>Low Temperature</td>
<td>Method</td>
<td>Method</td>
<td>Method</td>
</tr>
<tr>
<td>Temperature Shock</td>
<td>Method</td>
<td>Method</td>
<td>Method</td>
</tr>
<tr>
<td>Solar Radiation</td>
<td>I</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Humidity</td>
<td>Method</td>
<td>Method</td>
<td>Method</td>
</tr>
<tr>
<td>Salt Fog</td>
<td>Method</td>
<td>Method</td>
<td>Method</td>
</tr>
<tr>
<td>Blowing Dust</td>
<td>Method</td>
<td>Method</td>
<td>Method</td>
</tr>
<tr>
<td>Vibrations</td>
<td>Method</td>
<td>Method</td>
<td>Method</td>
</tr>
<tr>
<td>Shock</td>
<td>Method</td>
<td>Method</td>
<td>Method</td>
</tr>
</tbody>
</table>

### ENVIRONMENTAL

- Operating Temperature: -30° to +60° C
- Storage Temperature: -40° to +85° C
- ESD: IEC 801-2 KV
- Thermal Shock: 40° to +85° C
- Humidity: 95% RH @ 3 Hour
- Water and Dust Intrusion: IP 54

Accelerated Live Test

Motorola's Accelerated Life Test (ALT) is a developmental process of rigorous laboratory testing that simulates years of field use. Motorola has a firm commitment to quality and reliability. These radios have been designed, manufactured and tested to achieve high levels of component and workmanship quality. Motorola radios are designed to minimize costly repairs and downtime.

1. 5% receive, 5% transmit, 90% standby.
2. All electrical specifications and methods refer to EIA/TIA 603 standards. Specifications shown are typical and subject to change without notice.
3. 25 kHz not available in the US on new equipment after 1/1/2011.