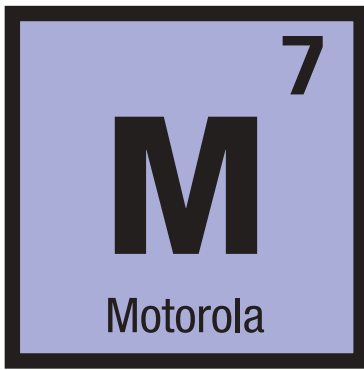


*Seven Essential Elements of
Solid Two-Way Communication*

CP150™
CP200™ PORTABLES
CM200™
CM300™ MOBILES

Two-Way Radios & Accessories





***Motorola M7:
Delivering All the Elements
You Need to Succeed***

Whether it's a solid, a liquid, or a gas, everything in the universe requires certain elements to make it what it is – including Motorola radios.

We've identified seven essential elements Motorola radios must have to meet your communication needs:

- **Value** to ensure you get the most for your communication dollars
- **Reliability** so you can depend on your radio, even in harsh environments
- **Ease of Use** for simple operation and customization
- **Audio Quality** to get your message through loud and clear
- **Size and Weight** to provide easy and convenient installation in almost any vehicle
- **Programmable** to customize features of each radio for each user
- **Range and Battery Life** that lets you reach coworkers across the street or across town with the power to talk as long as you need

Only by including all these elements can a two-way radio deliver the superb quality Motorola stands for – and the solid communication tools you require. And that's exactly what the newest Radius® Commercial Series two-way radios deliver. The CP150 and CP200 portables and the CM200 and CM300 mobiles provide users with the next level of M7.

Motorola – A Name You Know and Trust

For 75 years, Motorola has been a leader in creating state-of-the-art wireless communications for you. The Radius CP150 and CP200 portable and the CM200 and CM300 mobile two-way radios uphold that standard of excellence. Each radio is backed by a limited two-year* warranty on parts and labor. So when you select one of these two-way radios, you will experience the same exceptional quality you have come to expect from all Motorola products.

Motorola's durability is unmatched in the industry.



Exceptional Durability

There's a reason why Motorola two-way radios are built to last. Motorola's rugged and reliable radios, including the Radius CP150 and CP200 portables and the CM200 and CM300 mobiles, 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.

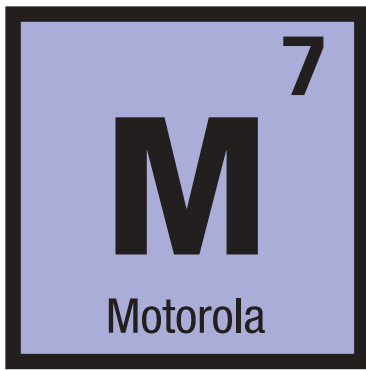
Vibration – Up to 9 hours of exposure to vibration that simulates the rigors a radio could undergo while being transported.

Shock – 18 shocks with a minimum G force of 40 Gs each.

In addition to these tests the CP150 and CP200 portables are also subjected to the following:

Temperature Storage – multiple hours of exposure to temperatures as low as -70° F followed by multiple hours of exposure to temperatures as high as 160° F.

*Radio accessories are covered by Motorola's One-year Limited Accessory Warranty..



**The CP150 and CP200 Radios:
High Performance at a Competitive Price**

The new Radius CP150™ and C200™ portable two-way radios deliver the quality features you want at a very competitive price. To provide either range that's best for your business, the CP150 radio is available in 2W UHF and VHF models. The CP200 radio is available in both 4W UHF and 5W VHF models. Powerful 500 mW audio output penetrates noisy environments, providing the clear, crisp audio at any volume. A lightweight, ergonomic design makes these radios comfortable to carry and operate, even while wearing gloves. A range of battery choices along with rapid recharging capabilities help ensure your radio is ready when you are. Programmable option buttons make it easy to customize your radio with your choice of features.



- Large, Textured Push-to-Talk Button
- Two Programmable Option Buttons
Supports a choice of up to four favorite functions with short/long press.



- Large Rotary Channel Selector
- Rotary On/Off and Volume Control
- Tricolor LED
- Accessory Connector
- 3 Inch Spring Action Belt Clip
Located on radio back.
- Rugged, Die-Cast Chassis
- Battery Latch lock
Located on radio bottom.



CP150™ CP200™

Portable Series

Two-Way Radios

CP150 and CP200 Features

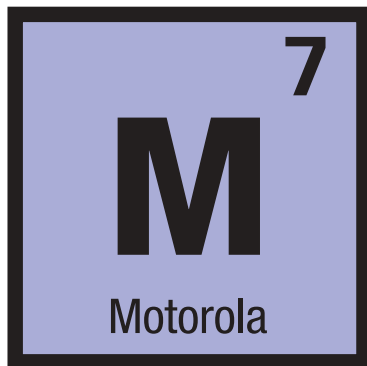
- *4/16 Conventional Channels*
- *Large Rotary Channel Selector
Changes channels quickly and easily*
- *Rotary On/Off and Volume Control*
- *Tricolor LED
Indicates radio status and battery levels*
- *Accessory Connector
Convenient access for audio accessories*
- *3 Inch Spring Action Belt Clip
Attaches 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 (42 standard TPL codes,
84 standard DPL codes and non-standard codes)*
- *System Scan and Auto Scan*
- *Single Priority Scan
(frequently scans higher priority channel)*
- *Battery Latch Lock
Secures battery*
- *2-year Standard Warranty*

Additional CP200 Programmable Features

In addition to the above features, the CP200 portable radio offers the following signaling features:

- **Quik-Call II™ Selective Call/Call Alert**
Lets individuals or groups receive selective pages via radio tones.
- **MDC Push-to-Talk Radio ID**
Sends unique ID information when transmitting.





MAKE SURE YOUR CP150 AND CP200 RADIOS ARE READY FOR ACTION

No question, CP150™ and CP200™ radios get plenty of use: their ergonomic features and lightweight design make them the constant companions of retail, hospitality, education, and security professionals. With this collection of high-performance accessories, you can easily tailor CP150 and CP200 radios to your exact working requirements.

The CP150/CP200 is perfect for, but not limited to, the following:

Education

Managing administration or security on large campuses requires keeping in touch with your colleagues. The CP150 and CP200 portable radios give you easy contact with colleagues who can help you keep everything under control.

Hospitality

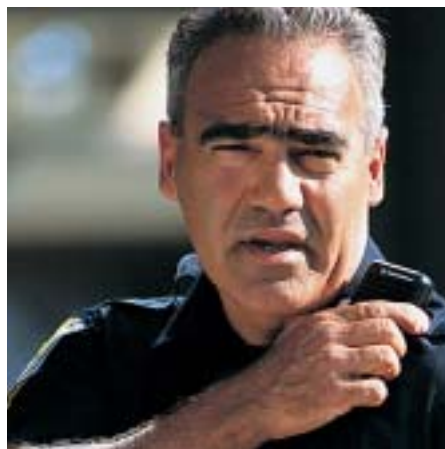
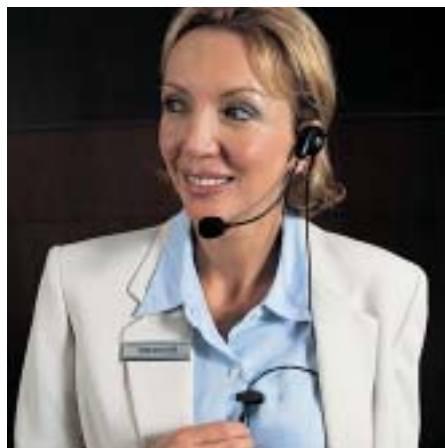
Whether you're coordinating staff for a conference or requesting a quick room change for a last-minute guest, you need communication that won't slow you down. The lightweight, ergonomically designed CP150 and CP200 portable radios are comfortable enough to use and carry all day.

Retail

In the retail industry, great customer service depends on fast response. The CP150 and CP200 radios let you connect at the touch of a button with store or stockroom personnel to get the information you need – when you need it.

Security

When an alarm signals illegal entry into the building you're securing, you don't have a moment to lose. The CP150 and CP200 radios give you the up-to-the-minute communication you need to alert coworkers or request backup at the touch of a button.



Advanced Communication Accessories

SECURITY PERSONNEL WORK EFFICIENTLY WITH AN EAR MICROPHONE SYSTEM

This miniature earpiece system picks up voice through bone vibrations in the ear canal, permitting direct hearing and speaking. Users' hands remain free, and their vision is unobscured. Sound quality is clear and true even when worn with protective masks or breathing apparatus. And it provides high speech clarity even in noisy environments.

BDN6646C

Ear Microphone System (EMS) with PTT Interface

For standard noise levels (up to 95dB)

BDN6706B

Ear Microphone System (EMS) with Voice Activated/PTT Interface

For standard noise levels (up to 95dB)

0180300E83

Body Switch Push-to-Talk for Ear Microphone System

Provides greater convenience to users. Users who wear large gloves or cumbersome uniforms can more easily reach this switch. Includes a swivel clip that allows positioning anywhere on the user's clothing.

0180358B38

Push-to-Talk Ring Switch for Ear Microphone System

Slips over the user's finger of choice.

0180300E25

Earguard with Adjustable Loop for Ear Microphone System

Earholder for Ear Microphone System

Secures microphone in ear. Choice of sizes in black or clear.

0180358B32 — Black, Small

0180358B33 — Black, Medium

0180358B34 — Black, Large

0180358B35 — Clear, Small

0180358B36 — Clear, Medium

0180358B37 — Clear, Large



Ear Microphone System (EMS) with PTT Interface.



Earholder for Ear Microphone System



0180300E83

Body Switch Push-to-Talk for Ear Microphone System . . . users who wear large gloves or cumbersome uniforms can more easily reach this switch.

Audio Accessories

HMN9036A
HMN9036AP – Resale Packaged
Earbud with Microphone and Push-to-Talk
 Pellet-style earpiece allows user to communicate discreetly and is comfortable for extended periods of time. Clip microphone securely attaches to shirt.

HLN9132A
Single-Wire Receive Only Earbud
 Ideal for users who need to receive information frequently, but seldom need to transmit.

BDN6720A
BDN6720AP – Resale Packaged
Black Flexible Ear Receiver
 Receive only earpiece contains a flexible ear loop and speaker worn on the outside of the ear.

HMN9727B
HMN9727BP – Resale Packaged
Beige Receive Only Earpiece
 Allows user to privately receive communication; ideal when discreet communication is important.

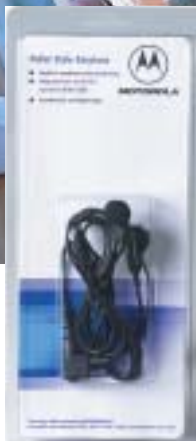
RLN4894A
Black Receive Only Earpiece
 Allows user to privately receive communication; ideal when discreet communication is important.

HMN9752B
Beige Receive Only Earpiece with Volume Control
 Allows user to privately receive communication; ideal when discreet communication is important. User can change volume without having to reach for the radio.

Earpiece Assembly with Microphone and Combined Push-to-Talk
 Two-wire accessory allows users to transmit and receive discreetly.
HMN9754D - Beige
RLN4895A - Black



HMN9036A



HMN9036AP



RLN4894A



NTN8371A

**RLN5198AP - Beige
Two-wire Surveillance Kit with Clear
Comfortable Acoustic Tube**

Includes a comfort earpiece with a rubber ear tip and a clear comfortable acoustic tube. Users can hear transmissions clearly, while the clear tube provides a discreet appearance.

NTN8370A - Extreme Noise Kit

Includes two foam earplugs designed for use in loud environments. Provides 24dB of noise reduction. Compatible with Motorola 1, 2 and 3-wire surveillance accessories.

NTN8371A - Low Noise Kit

Includes rubber ear tip for low noise environments; does not provide hearing protection. Compatible with Motorola 1, 2 and 3-wire surveillance accessories.



Clear Comfortable Earpiece

- RLN4760A - Small, Right Ear**
- RLN4761A - Medium, Right Ear**
- RLN4762A - Large, Right Ear**
- RLN4763A - Small, Left Ear**
- RLN4764A - Medium, Left Ear**
- RLN4765A - Large, Left Ear**
- Clear Comfortable Earpiece**

Designed to form to the inside of the ear; perfect for low noise environments. Made of easy-to-clean, chemically-inert hypo-allergenic material. Requires NTN8371A Clear Acoustic Tube Assembly and a Motorola Surveillance Kit for operation.

Audio Accessories

AUDIO ACCESSORIES FOR ENHANCED COMMUNICATION

**HMN9013A
Adjustable Headset with Swivel Boom Microphone**

Single-muff adjustable headset with swivel boom microphone allows for high-clarity, hands-free communication for extended wear in moderately noisy environments. Works with radio Push-to-Talk button.

**HMN9021A
Medium Weight Dual Muff Headset**

Over-the-head style, medium weight headset offers clarity sound with the additional protection necessary for providing clear two-way radio communication in harsh, noisy environments. Noise reduction of 24dB.

**HMN9022A
Medium Weight Dual Muff Headset**

Behind-the-head style, medium weight headset offers high clarity sound with the additional protection necessary for providing clear two-way radio communication in harsh, noisy environments. Can be worn with most hardhats. Noise reduction of 24dB.

**RLN5238A
NFL® Style Lightweight Headset**

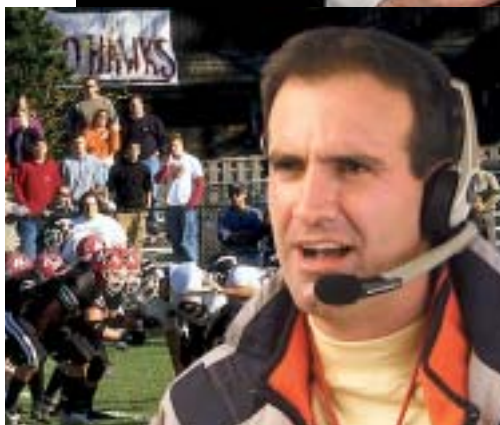
Ergonomically-designed for all-day comfort; ideal for both sports and special events. Features a noise-canceling boom microphone and in-line Push-to-Talk. Large Motorola logo adds a sporty appearance.

**RLN5411A
Ultra-Lightweight Behind-The-Head Headset**

Sleek design provides all day comfort for restaurant and hospitality professionals. Includes flexible boom microphone and in-line Push-to-Talk.

**RLN5500A
Accessory Retainer Clip**

Holds audio accessories securely to radio in demanding environments.



Adjustable Headset with Swivel Boom Microphone, above, lets users talk hands-free in real comfort.

NFL Style Lightweight Headset (left) is ergonomically-designed for all-day comfort

Remote Speaker Microphone with Coil Cord and Swivel Clip is ideal for moderate noise level environments.

**HMN9030A
Remote Speaker Microphone with Coil Cord and Swivel Clip**

Allows users to talk and listen without removing the radio from the belt, case or charger. Ideal for moderate noise level environments. This water-resistant microphone includes a 6-foot Coiled Cord Assembly, and Swivel Clip.



**BDN6648C
Heavy-Duty Headset**

Behind-the-head style with noise reduction rating of 24dB; can be worn with most hard hats. Includes noise-canceling boom microphone and Push-to-Talk switch located on the earcup. VOX module is contained within the headset.

**RMN4016A
Lightweight Headset with In-line Push-to-Talk**

Single-muff adjustable headset with swivel boom microphone and in-line Push-to-Talk allows for high-clarity, hands-free communication while adding the comfort necessary for extended wear in moderately noisy environments. In-line Push-to-Talk adds convenience for communication without having to reach for the radio.

**RMN5015A
Racing Headset**

Heavy-duty behind-the-head style can be worn with most hard hats. Noise-canceling swivel boom microphone and noise reduction rating of 24dB make this ideal for high-noise environments; racing teams like CART use it in the pits for dependable communication. Radios require Adapter Cable sold separately below.

**RKN4090A
Radio Adapter Cable**

For use with CP150 and CP200 Two-way radios and RMN5015A Racing Headset.

**PMMN4001A
Ultra-Light Earpiece with Microphone and In-line Push-to-Talk**

Small and lightweight earpiece clips comfortably to the ear. Has boom microphone and in-line Push-to-Talk button for added convenience.



This Heavy-Duty Headset has a noise reduction rating of 24dB, providing exceptional performance in challenging noise environments.

Antennas

NAD6502AR
VHF Heliflex Antenna, 146-174 MHz

HAD9742A
VHF Stubby Antenna, 146-174 MHz

HAD9743A
VHF Stubby Antenna, 162-174 MHz

NAE6483AR
6 Inch Flexible Whip Antenna, 403-520 MHz

NAE6522AR
UHF Heliflex Stubby Antenna, 438-470 MHz



CP200 with a VHF 162-174 MHz stubby antenna.

Carry Cases

RLN5383A

Leather Carry Case with Belt Loop and D-shaped Rings

Protects radio in demanding environments.

RLN5384B

Leather Carry Case with High-Activity 2.5 Inch Swivel Belt Loop

Protects radio in demanding environments. Swivel design moves from side to side to accommodate the user's position. Holds case securely to belt loop while allowing easy removal of the radio.

RLN5385B

Leather Carry Case with High-Activity 3 Inch Swivel Belt Loop

Protects radio in demanding environments. Swivel design moves from side to side to accommodate the user's position. Wide 3" belt loop accommodates wider belts. Holds case securely to belt loop while allowing easy removal of the radio.



RLN5385B

HLN8255B

3 Inch Spring Action Clip

Simple and easy to use solution for users who want a low cost, lightweight carrying accessory and do not require the protection of a carry case. Designed to withstand rigorous environments. Ships standard with the CP150 and CP200 radios.

HLN9701B

Nylon Carry Case with Belt Loop and D-shaped Rings

Ideal solution for those users who want a lightweight carrying accessory combined with the protection of a carry case.



ACCESSORIES FOR GREATER CONVENIENCE

Portable Radio Hangers

Slides over and hangs from the door panel in a vehicle; radio attaches easily with the belt clip. Available in two sizes.

TDN9327A — Portable Radio Hanger

For door panels up to 2.75 inches.

TDN9373A — Portable Radio Hanger

For door panels up to 3.25 inches.

Chargers

WPLN4138AR **Single-unit Rapid Rate Tri-chemistry Desktop Charger**

Lightweight and compact unit charger rapidly charges CP150 and CP200 NiCd and Li-ion batteries within two hours.

EPNN7997A **10-Hour Plug-in Charger**

Slow-rate charger plugs directly into the radio accessory connector. For use with the NNTN4496AR NiCd battery only.

WPLN4161AR **6-Pocket Rapid Rate Multi-Unit Charger**

Offers six pockets that can be used to rapid charge 1 to 6 batteries simultaneously. Batteries can be charged with the radios or separately. Charges NiMH, NiCd and Li-ion. 120V.



MOTOROLA M7

*WPLN4161AR
Batteries can be charged with
the radios or separately.
Radios sold separately.*

enhanced . . .



WPLN4138AR

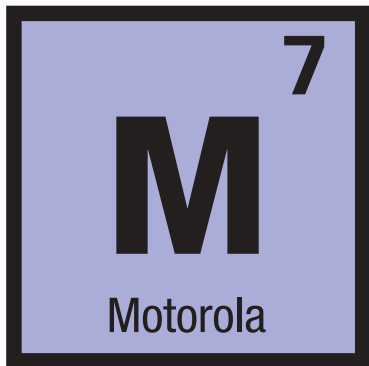
Batteries

NNTN4497AR **1800 mAh Li-ion Battery**

Li-ion batteries offer the best power-to-weight ratio of all battery chemistries, and do not demonstrate memory effect. Provides up to 17 hours of CP150 radio talk time or up to 14 hours of CP200 radio talk time. With built-in circuit protection.

NNTN4496AR **1100 mAh NiCd Battery**

Ideal for cold weather environments, this NiCd battery provides more watt-hours of operation per shift than any other battery chemistry.



**The CM200 and CM300 Radios:
Excellence in Design**

Great care was taken in the design process of the CM200™ and CM300™ to ensure ruggedness and reliability, ease of use and functionality. Some things you'll notice about Motorola's new mobiles:

They feature large controls that are easy to grip or press even when wearing gloves. The powerful 4-watt speaker is forward-facing (instead of on top of the radio) for superior clarity. Three color LED indicators (red, yellow, green) show visible feedback of transmit, scan and monitor status. The microphone and controls are located on the left, closest to driver for easy reach and bright visual indicators can be read at a glance. Both features that help drivers keep their eyes on the road.

Everything that goes in or on a Motorola radio is carefully considered, reviewed, designed, reviewed again and manufactured to extremely high-quality standards and these radios really show it.



CM200™

Mobile Series

Two-Way Radios

CM200 Features

- 4 Channels
- Audio Indicator Tones
- VHF and UHF Frequencies
- Time-Out Timer
- Busy Channel Lockout
- Voice-Operated Transmit (requires voice-activated microphone)
- TPL Standard and Non-Standard Reverse Burst (for better compatibility with existing fleets)
- Privacy Codes (42 standard TPL codes, 84 standard DPL codes and non-standard codes)
- Single Priority Scan allows user to listen for activity on multiple channels
- Quik-Call II™ Decode Selective Call/Call Alert
Selective Call: Allows receipt from specific group or individual
Call Alert: Receives notification from a specific group or individual user with an alert tone and lighted LED
- MDC 1200 Push-to-Talk Identification Encode: Sends unique digital ID information when transmitting (PTT ID), which can be displayed on radios equipped with MDC decode
- 2-year Standard Warranty

CM200 Programmable Features

(Users can choose up to 4.)

- **Scan On/Off**
Enables/disables scan mode of operation
- **High/Low Power**
Adjusts transmit power to accommodate user environment
- **Repeater Talkaround**
Unit-to-unit communication, bypassing the repeater
- **Local/Distance**
Local mode reduces interference from nearby radios; distance mode helps improve range
- **Tight/Loose Squelch**
Tight squelch helps minimize interference from undesired weak signals; loose squelch helps weak signals to be heard
- **Nuisance Channel Delete**
Temporarily deletes a specific channel from your scan mode if you no longer want to hear activity on that channel
- **Volume Set**
Sets preferred volume level for radio speaker
- **Silent Monitor/Open Squelch**
Silent monitor causes radio to remain silent when there is no channel activity. Open squelch monitor causes "white noise" to be heard when there is no channel activity
- **VOX On/Off**
Enables/disables voice-operated transmit functionality for the current channel
- **Escalart**
Increases volume of unanswered alarm alert



CM300™

Mobile Series
Two-Way Radios



- **32 Channels**
- **8-Character Alphanumeric Display With User-Friendly Icons**
Assign a name to each channel for ease of use.
- **Die-Cast Housing with Polycarbonate Outer Casing**
- **4-Watt Front-Projecting Speaker**
- **4 Programmable Buttons (P1, P2, P3, P4)**
Customize shortcuts for up to 8 favorite features with a short/long press (4 more than CM200)
- **Red/Yellow/Green LED Indicators**
- **Up/Down Channel Selector and Menu Scroll Buttons**
- **Rotary On/Off/Volume Control**

CM300 Features

- 32 Channels
- Audio Indicator Tones
- VHF and UHF Frequencies
- Time-Out Timer
- Busy Channel Lockout
- Escalert (*increases volume of unanswered alarm alert*)
- Voice-Operated Transmit (*requires voice-activated microphone*)
- TPL Standard and Non-Standard Reverse Burst (*for better compatibility with existing fleets*)
- Privacy Codes (*42 standard TPL codes, 84 standard DPL codes and non-standard codes*)
- Menu Mode
- System Scan and Auto Scan
- Supports Up to 16 Scan Lists of Up to 16 Channels Each
- Single and Dual Priority Scan (*frequently scans higher-priority channels*)
- Revert Scan (*radio moves automatically to last landed scan channel when exiting scan mode*)
- Customizable Audio Indicator Tones
- Adjustable Backlight Intensity
- Option Board Expandability

CM300 Programmable Features

(Users can choose up to 8.)

- **2-Channel Home Revert**
Returns to 1 or 2 favorite channels
- **Volume Set**
Sets preferred volume level for radio speaker
- **Silent Monitor/Open Squelch**
Silent monitor causes radio to remain silent when there is no channel activity; open squelch monitor causes "white noise" to be heard when there is no channel activity
- **High/Low Power**
Adjusts transmit power to accommodate user environment
- **Repeater Talkaround**
Unit-to-unit communication, bypassing the repeater
- **Local/Distance**
Local mode reduces interference from nearby radios; distance mode helps improve range
- **Tight/Loose Squelch**
Tight squelch helps minimize interference from undesired weak signals; loose squelch helps weak signals to be heard
- **Nuisance Channel Delete**
Temporarily deletes a specific channel from your scan mode if you no longer want to hear activity on that channel
- **Scan On/Off**
Enables/disables scan mode of operation
- **VOX On/Off**
Enables/disables voice-operated transmit functionality for the current channel
- **Escalert**
Increases volume of unanswered alarm alert
- **Menu Mode**
Access to radio menu and to select a menu option
- **Option Board On/Off**
Enables/disables option board functionality for the current personality
- **Phone Mode**
Provides access to telephone interconnect through a repeater
- **Speed Dial**
Initiates a phone call to a preprogrammed recipient with the press of a DTMF key (requires DTMF keypad)
- **Radio Call**
Allows a user to initiate Quik-Call II™ and/or DTMF Call Alert or Selective Call Encode from a call list
- **Scan List Edit**
Allows user to add/remove channels from current scan list
- **External Alarm**
Activates a warning or alert by triggering flashing headlights, a siren or a horn (requires an external alarm accessory and an accessory connector pin to be programmed for external alarm through CPS)

- **Quik-Call II™ Encode/Decode Selective Call/Call Alert**
Selective Call: Calls a specific group or individual
Call Alert: Notifies a specific group or individual user with an alert tone and lighted LED
- **MDC 1200 Signaling (PTT ID, Selective Radio Inhibit Decode, Radio Check Decode)**
PTT ID Encode/Decode: Sends unique digital ID information when transmitting (PTT ID), which can be displayed on radios equipped with MDC Decode
Selective Radio Inhibit Decode: Dispatcher can remotely disable radio to prevent transmission from reaching stolen or inactive radios
Radio Check Decode: Dispatcher can determine remotely if radio is powered on without disturbing user
- **2-year Standard Warranty**

MAKE SURE YOUR CM200 AND CM300 RADIOS ARE READY FOR ACTION

The CM200 and CM300 are new commercial mobile radios ideal for use by smaller organizations: users who are new to two-way mobile radios and those who are price-sensitive. The CM200/CM300 is perfect for, but not limited to, the following:

Agriculture

Small size makes mounting in a tractor, combine, pickup truck or almost any farm vehicle easy. This unit enables cohesive coordination of agricultural tasks, as well as emergency response, when necessary. And because it's mounted inside the vehicle, it helps keep the work flowing no matter what the weather.

Hospitality

You can improve customer service with immediate communication between your base station, portables and mobiles. It's ideal for weather extremes on the golf course, ski hill or seaside resort, it's mounted inside the vehicle. And the small size makes installation easy in almost any vehicle, even a golf cart.

Manufacturing

You can communicate effectively in noisy environments with powerful 4-watt speaker and improved audio. These units are lightweight and the small size make mounting easy in forklifts, delivery trucks and other vehicles. It's perfect for control station applications where you need to communicate with portables on the floor and mobiles on the road.

Retail/Delivery Services

Now you can quickly and effectively coordinate shipping to maximize efficiency and service. You can handle order changes and prioritize delivery schedules at any time. Avoid miscommunication or frequent repeated messages with powerful, clear audio.

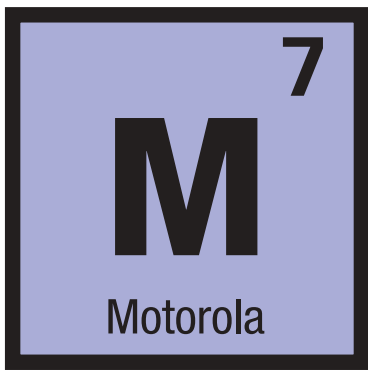
Taxi and Limousine Services

This unit allows you to quickly and easily alert drivers regarding passenger pickup. It helps drivers keep their eyes on the road with audio indicators that "beep" for features and functions, including channel changes. And its durable design stands up to potholes and rough roads.

Transportation/Fleet

Conveniently ensures that all drivers are clear on their responsibilities and headed in the right direction. You can change routes or priorities at a moment's notice with the touch of a button and this unit provides an immediate link when drivers need assistance. It is an extremely economic solution for school transportation fleets





CM200/CM300 Radio Accessories

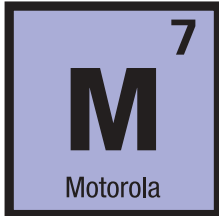
A variety of Motorola Original® and Certified Accessories are available for the CM200™ and CM300™ radios to expand the capabilities of the radios and create a customized communication solution for your business. Motorola Original® Accessories carry a one-year limited warranty. Several M1225 accessories are compatible with the CM200 and CM300.

- **Audio Accessories – microphones and speakers**
Make it easy to hear and be heard
- **Hands-Free Accessories**
Improve operating convenience and safety
- **Desktop Base Station Accessories – power supplies, stands**
Set up an efficient, centralized base station
- **Mounting Accessories**
Customize the mobile's mounting for added convenience
- **Antenna Accessories**
Transmission and reception is everything
- **Mobile Data Accessories**
Information is power with mobile data and GPS
- **Public Address Accessories**
Get the word out to everyone in the immediate area
- **Alarm Accessories**
Provide a warning or an alert
- **Installation Accessories**
Make sure your radios are installed properly



Audio Accessories

**MICROPHONE ACCESSORIES
HELP GET THE WORD OUT**



HMN3413A

Compact Palm Microphone with Clip

Comes with a 7-foot coil cord and clip. Ships standard with CM200 and CM300 radios.

HMN3596A

Compact Palm Microphone

Comes with a 7-foot coil cord.

HMN1035C

Heavy-Duty Palm Microphone

Large design provides easier use by glove wearers. Comes with a 10.5-foot coil cord.

RMN5029A

Enhanced Keypad Microphone

Backlit 12-digit DTMF keypad generates tones for accessing telephone systems through a repeater equipped with telephone interconnect. Comes with a 7-foot coil cord with clip.

HLN9073B

Microphone Hang-Up Clip

Mounts in vehicle to secure mobile microphone. Compatible with all Motorola microphones. Installation required.

HLN9414A

Universal Hang-Up Clip

Compatible with all Motorola microphones. No installation required.

AAREX4617A

Telephone-Style Handset

Ideal for users wanting to conduct private conversations. Ergonomically-designed, easy to hold. Includes cup and hardware.



Telephone-Style Handset is ideal for users wanting to conduct private conversations.

Heavy-Duty Palm Microphone is larger, providing easier use for glove wearers.



AAREX4617A



the perfect fit . . .

**EXTERNAL SPEAKERS AND
PUBLIC ADDRESS SYSTEMS
FOR HIGH-NOISE ENVIRONMENTS**

HSN8145B

External 7.5 Watt Speaker

Offers a high level of radio volume output.

RLN5288A

Public Address Kit

Includes two cables for mobile connection to public address box and speaker cables. Requires HSN1000B speaker.

HSN1000B

Amplified External Speaker for Public Address Audio

6 Watt. Required for use with RLN5288A.

HKN9324AR

Public Address/Speaker Cable

15 foot length. One cable per speaker required.

RSN4001A

External 13 Watt Speaker

Ideal for extremely noisy environments.



External 7.5 Watt Speaker shown with Desktop Microphone, radio and power supply. All sold separately.

Amplified External Speaker for Public Address Audio Kit.

External 13 Watt Speaker is perfect for noisy environments.

Hands-Free Accessories

**HANDS-FREE
ACCESSORIES
PROVIDE GREATER
CONVENIENCE**

**AARMN4027A
Visor Microphone**

Mounts to visor for convenient hands-free operation. Provides wind noise reduction. For use in conjunction with push-to-talk accessories RLN4856A, RLN4857A or RLN4858A.

**RLN4856A
Foot Switch with Push-to-Talk**

Mounts to floor of vehicle; to be used in conjunction with visor microphone.

**RLN4857A
Pushbutton with Push-to-Talk**

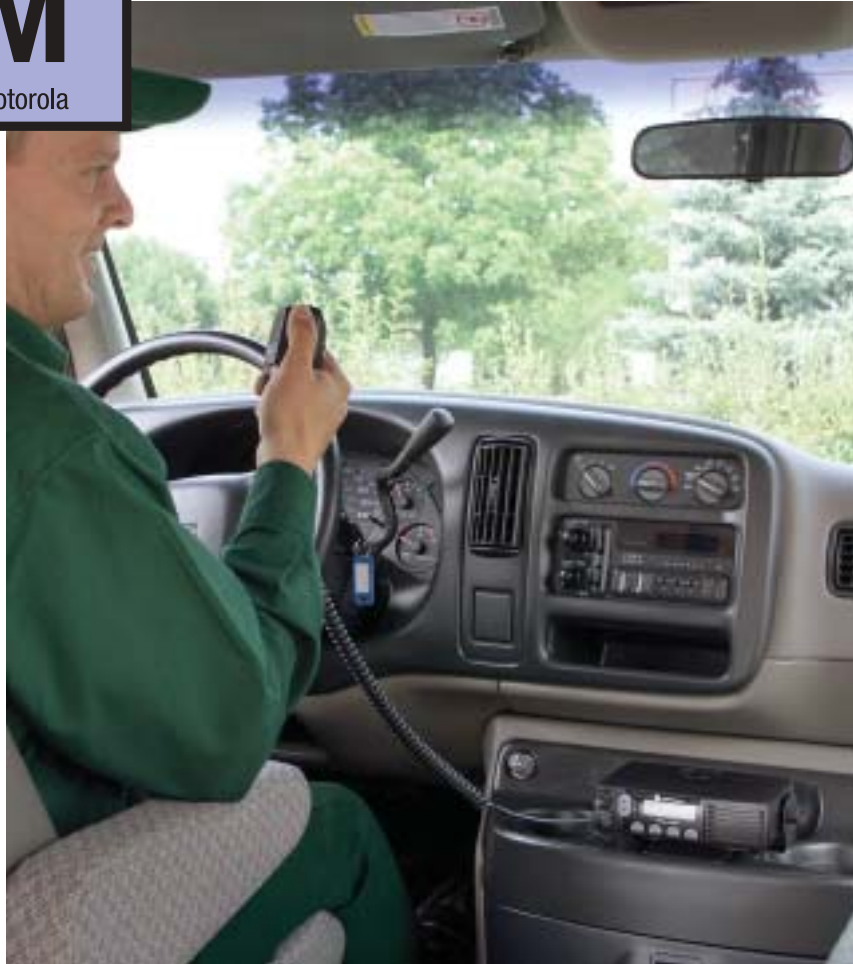
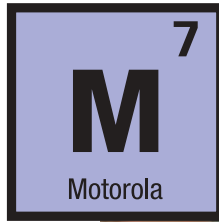
Can be held in the hand, or mounted to the vehicle with touch fasteners. To be used in conjunction with visor microphone.

**RLN4858A
Gooseneck Mount with Push-to-Talk**

Mounts to steering wheel column; to be used in conjunction with visor microphone.

**RLN4836AR
Emergency Foot Switch**

Lets user notify the base station quickly and discreetly of trouble. Sends signal to base station and activates the microphone.



Use the Visor Microphone and Pushbutton with Push-to-Talk for convenient hands-free operation.



*Hands-free and professional
installation options for
greater convenience.*

**INSTALLATION AND
MISCELLANEOUS ACCESSORIES**

**HKN4137AR
Low-Power Cable**

Connects battery to radio chassis. 1-45W, 12V.

**HKN4191B
High-Power Cable**

Connects battery to radio chassis. 40-60W, 12V.

**HLN9242A
16-Pin Accessory Kit with Expanded Connector**

Allows existing 16-pin connector accessories to be modified for enhanced reliability when used with CM Series mobile radios. Includes 9 wires with lugs, 1 connector housing, 16 crimping terminals, 2 tie straps and 1 extraction tool.

**HKN9327BR
Ignition Switch Cable with Housing Connector**

Provides mobile users with the option of having the radio turn on when they start the ignition. Cable connects radio chassis to battery. Requires HLN9242A Kit.

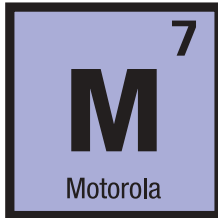
**HLN9328C
External Alarm Relay Cable – Horns and Lights**

**GLN7282A
Alarm Buzzer Kit**

*better
faster
productivity
solutions . . .*

Mounting Accessories

MOUNTING ACCESSORIES FREE DASHBOARD SPACE



GLN7324A
Low-Profile Mounting Bracket
Keeps radio tucked up under the dash; can also be positioned for floor mounting.

GLN7317A
High-Profile Mounting Bracket
Keeps radio tucked up under the dash, with extra clearance so radio can be tilted for a better view. Can also be positioned for floor mounting.

HLN9227A
Gooseneck Mounting Bracket
Handles a wide range of mounting challenges, and provides better viewing of display. Allows for mounting on a vertical surface.

HLN8097A
Removable Slide Mount
Ideal for users who move radios from vehicle to vehicle; radio slips in and out of mount.



The Low-Profile Mounting Bracket keeps radio tucked up under the dash.



With a Removable Slide Mount the radio slips in and out of mount.

on the move . . .



MOTOROLA M7

HAD4006A - VHF 136-144MHz, 1/4 Wave Roof Mount
HAD4007A - VHF 144-152MHz, 1/4 Wave Roof Mount
HAD4008A - VHF 152-162MHz, 1/4 Wave Roof Mount
HAD4009A - VHF 162-174MHz, 1/4 Wave Roof Mount

HAD4014A - VHF 140-174MHz, 3dB Gain Roof Mount

RAD4000A - VHF Antenna Only, 140-174MHz

RAD4000AMB - VHF 140-174MHz, 3dB Gain Magnetic Mount

HAE4003A* - UHF 450-470MHz, 1/4 Wave Roof Mount

RAE4004ARB - UHF 450-470MHz, 5dB Gain Roof Mount
RAE4004AMB - UHF 440-470MHz, 5dB Gain Magnetic Mount

TAE6053A - UHF 430-450MHz, 1/4 Wave Roof Mount

*Quantity discounts available.



High-Profile Mounting Bracket keeps radio tucked up under the dash, with extra clearance so radio can be tilted for a better view. Shown here with CM300 and Standard Microphone. Sold separately.

Mobile Data Accessories

GET EVERYONE MOVING WITH THESE MOBILE DATA ACCESSORIES

**RDN7368A
Mobile Display Terminal**

Provides mobile status reporting and text messaging through its internal data modem. Features a 4x40 backlit LCD screen, 14-button status keypad, 5 serial ports for peripheral interfaces, and 6 auxiliary I/Os.

**RDN7367A
Mobile Display Terminal with GPS**

As RDN7368, but also equipped with an Automatic Vehicle Location (AVL) device compatible with Global Positioning System technology.

**RDN7369A
Stand-Alone Modem with GPS**

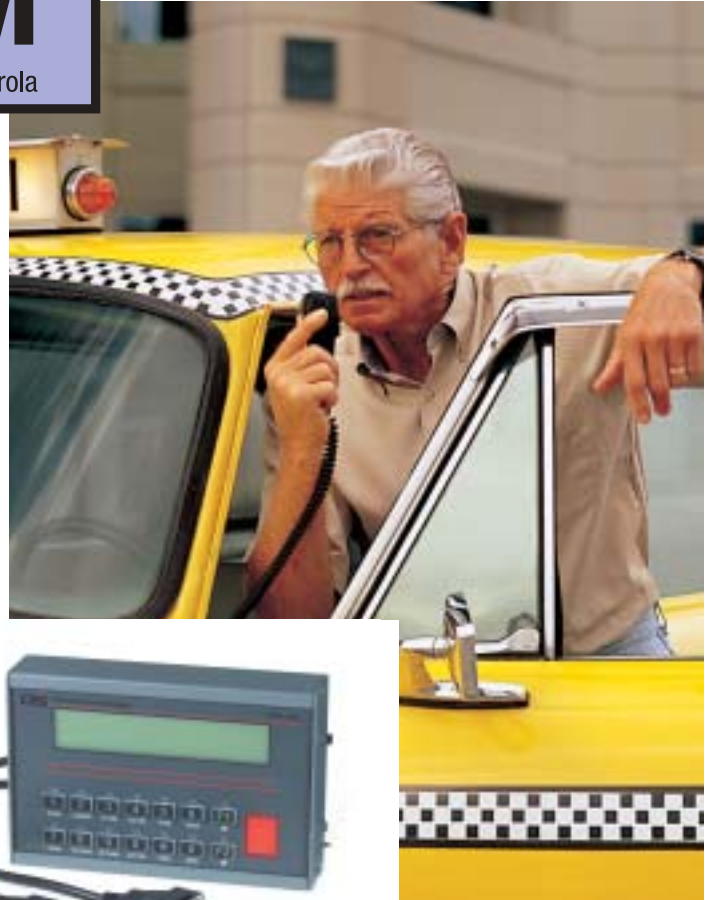
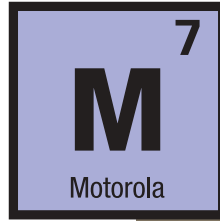
A cost-efficient way to add an Automatic Vehicle Location (AVL) device compatible with Global Positioning System technology. Also provides additional serial ports and auxiliary I/Os.

**RDN7364A
Base Radio Channel Controller**

A radio channel controller and modem that interfaces with the base radio; required with every radio channel or wireless circuit used within the fleet.

**RDN7372A
Fixed Mount GPS Active Antenna**

**RDN7375A
Magnetic Mount GPS Antenna**



Mobile Display Terminal is available with Automatic Vehicle Location system. Sold separately.

RDN7374A
Programming Software

RDN7377A
MAPS (US) Regional Software

RDN7378A
AVL Messaging Status Software

RDN7380A
Mobile Programming Hardware

RDN7738A
Serial Breakout Unit
 Allows for multi-channel applications; up to 8 channel controllers can be interfaced to the base computer system. Units can also be daisy-chained together to further increase capacity. Ideal for taxi, ready-mix, education services and other markets. Use optional cables below to add two-way radio connector.

RDN7739A
3 Foot Flying Lead Cable

RDN7740A
15 Foot Flying Lead Cable

top priority . . .



CP150™/CP200™ Portable Two-Way Radio Specifications*

General Specifications

	VHF	UHF
Frequency:	136-162 MHz 146-174 MHz	438-470 MHz, CP200 Only: 403-440 MHz, 465-495 MHz
Channel Capacity:	4 or 16 Channels	4 or 16 Channels
Power Supply:	7.2 Volts ± 20%	7.2 Volts ± 20%
Dimensions: with 1100 mAh NiCd and 1800 mAh Li-ion Batteries: with 1400 mAh NiMH Battery: with 1600 mAh Slim Li-ion Battery:	127.5mm H x 61.5mm W x 45mm D (5.0" H x 2.4" W x 1.75" D) 127.5mm H x 61.55mm W x 43mm D (5.0" H x 2.4" W x 1.69" D) 127.5mm H x 61.55mm W x 42mm D (5.0" H x 2.4" W x 1.65" D)	127.5mm H x 61.5mm W x 45mm D (5.0" H x 2.4" W x 1.75" D) 127.5mm H x 61.55mm W x 43mm D (5.0" H x 2.4" W x 1.69" D) 127.5mm H x 61.55mm W x 42mm D (5.0" H x 2.4" W x 1.65" D)
Weight: with 1800 mAh Li-ion Battery: with 1600 mAh Slim Li-ion Battery: with 1400 mAh NiMH Battery: with 1100 mAh NiCd Battery:	370g (13.04 oz.) 374g (13.19 oz.) 444g (15.66 oz.) 425g (14.98 oz.)	370g (13.04 oz.) 374g (13.19 oz.) 444g (15.66 oz.) 425g (14.98 oz.)
Average Battery Life @ 5-5-90 Duty Cycle: 1800 mAh Li-ion: 1600 mAh Slim Li-ion: 1400 mAh NiMH: 1100 mAh NiCd:	2W 5W 17 Hrs. 14 Hrs. 14 Hrs. 12 Hrs. 11 Hrs. 10 Hrs. 9 Hrs. 8 Hrs.	2W 4W 17 Hrs. 14 Hrs. 14 Hrs. 12 Hrs. 11 Hrs. 10 Hrs. 9 Hrs. 8 Hrs.
FCC Designation:	ABZ99FT3045	ABZ99FT4056, ABZ99FT4057, ABZ99FT4058

Receiver Specifications

	VHF 12.5 kHz	VHF 20/25/30 kHz	UHF 12.5 kHz	UHF 20/25/30 kHz
Sensitivity: (12 dB EIA SINAD)	0.25 uV (typical)	0.25 uV (typical)	0.25 uV (typical)	0.25 uV (typical)
Adjacent Channel Selectivity:	-65 dB	-70 dB	-60 dB	-70 dB
Intermodulation:	-70 dB	-70 dB	-70 dB	-70 dB
Frequency Stability: (-30° C to +60° C)	0.00025%	0.00025%	0.00025%	0.00025%
Spur Rejection:	-75 dB	-75 dB	-75 dB	-75 dB
Image and 1/2 I-F Rejection:	-70 dB	-70 dB	-70 dB	-70 dB
Audio Output @ < 5% Distortion:	500mW	500mW	500mW	500mW

Transmitter Specifications

	VHF	VHF	UHF	UHF
RF Output:	Low 2W	High 5W	Low 2W	High 4W
Channel Spacing:	12.5/20/25 kHz	12.5/20/25 kHz	12.5/20/25 kHz	12.5/20/25 kHz
Frequency Stability: (-30° C to +60° C)	0.00025%	0.00025%	0.00025%	0.00025%
Spurs/Harmonics:	-36 dBm < 1 GHz -30 dBm > 1 GHz	-36 dBm < 1 GHz -30 dBm > 1 GHz	-36 dBm > 1 GHz -30 dBm > 1 GHz	-36 dBm > 1 GHz -30 dBm > 1 GHz
Audio Response: (from 6 dB/oct. Preemphasis, 300 to 3000 Hz)	+1, -3 dB	+1, -3 dB	+1, -3 dB	+1, -3 dB
Audio Distortion: @ 1000 Hz, 60% Rated Max. Dev.	<3%	<3%	<3%	<3%
FM Noise:	-40 dB (12.5 kHz) -45 dB (25 kHz)	-40 dB (12.5 kHz) -45 dB (25 kHz)	-40 dB (12.5 kHz) -45 dB (25 kHz)	-40 dB (12.5 kHz) -45 dB (25 kHz)
FCC Modulation: 20/25/30 kHz 12.5 kHz	16KOF3E 11KOF3E	16KOF3E 11KOF3E	16KOF3E 11KOF3E	16KOF3E 11KOF3E

CP150/CP200 Portable Military Standards

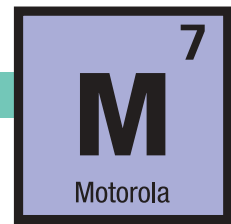
	810C	810C	810D	810D	810E	810E	810F	810F
	Methods	Procedures	Methods	Procedures	Methods	Procedures	Methods	Procedures
Low Pressure:	500.1	1	500.2	2	500.3	2	500.4	1
High Temperature:	501.1	1, 2	501.2	1, 2	501.3	1, 2	501.4	1, 2
Low Temperature:	502.1	1	502.2	1, 2	502.3	1, 2	501.4	1, 2
Temperature Shock:	503.1	1	503.2	1	503.3	1	503.4	1
Solar Radiation	505.1	1	505.2	1	505.3	1	505.4	1
Rain:	506.1	1, 2	506.2	1, 2	506.3	1, 2	506.4	1
Humidity	507.1	2	507.2	2, 3	507.3	2, 3	507.4	3
Salt Fog:	509.1	1	509.2	1	509.3	1	509.4	1
Dust:	510.1	1	510.2	1	510.3	1	510.4	1
Vibration:	514.2	8, 10	514.3	1	514.4	1	514.5	1
Shock:	516.2	1, 2, 5	516.3	1, 4	516.4	1, 4	516.5	1

Accelerated Life 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.

CM200™/CM300™ Mobile Two-Way Radio Specifications*

General Specifications



MOTOROLA M7

	VHF	UHF
Channel Capacity:	4 (CM200) 32 (CM300)	4 (CM200) 32 (CM300)
Technical RF Output:		
Low Power:	1-25W	1-25W
High Power:	25-45W	25-40W
Frequency:	136-162 MHz (CM300 Only) 146-174 MHz	438-470 MHz
Dimensions: (H * W * L)	1.73" x 6.67" x 4.64" (44mm x 169mm x 118mm)	1.73" x 6.67" x 4.64" (44mm x 169mm x 118mm)
Weight: (Radio only)	2.25 lbs (1.02 Kg)	2.25 lbs (1.02 Kg)
Current Drain: Standby	0.3A	0.3A
Rx@ rated, external 8 ohm speaker	1.5A	1.5A
Transmit	7A (25W), 9.5A (45W)	8A (25W), 9A (40W)
FCC Description:	136-162 146-174	ABZ99FT3049 (45W) AZ492FT3805 (25W) ABZ99FT3046 (45W)
		AZ492FT4856 (25W) ABZ99FT4048 (40W)

Receiver Specifications

	VHF	UHF
Channel Spacing:	12.5/20/25 kHz	12.5/20/25 kHz
Frequency Stability: (-30 C to +60 C)	+/-2.5 ppm	+/-2.5 ppm
Sensitivity: (12 dB EIA SINAD)	0.35 uV (12.5 kHz), 0.3 uV (25 kHz) typical	0.35 uV (12.5 kHz), 0.3 uV (25 kHz) typical
Intermodulation:	65 dB (12.5 kHz), 75 dB (25 kHz)	60 dB (12.5 kHz), 70 dB (25 kHz)
Adjacent Channel Selectivity:	65 dB (12.5 kHz), 75 dB (25 kHz)	60 dB (12.5 kHz), 70 dB (25 kHz)
Spurious Rejection:	75 dB	70 dB
Rated Audio: (Extended audio with 4 ohm speaker)	4W internal, 13W external	4W internal, 13W external
Audio Distortion @ Rated Audio:	3% typical	3% typical
Hum and Noise:	-40 dB (12.5 kHz) -45 dB (25 kHz)	-35 dB (12.5 kHz) -40 dB (25 kHz)
Audio Response:	TIA603 & ETS300	TIA603 & ETS300
Conducted Spurious Emission:	-57 dBm < 1 GHz -47 dBm > 1 GHz	-57 dBm < 1 GHz -47 dBm > 1 GHz

Transmitter Specifications

	VHF	UHF
Channel Spacing:	12.5/20/25 kHz	12.5/20/25 kHz
Frequency Stability: (-30 C to +60 C)	+/-2.5 ppm	+/-2.5 ppm
Modulation Limiting:	+/-2.5 kHz (12.5 kHz) +/-4 kHz (20 kHz) +/-5 kHz (25 kHz)	+/-2.5 kHz (12.5 kHz) +/-4 kHz (20 kHz) +/-5 kHz (25 kHz)
FM Hum and Noise:	-40 dB (12.5kHz) -45 dB (25 kHz)	-35 dB (12.5 kHz) -40 dB (25 kHz)
Conducted/Radiated Spurious Emission:		
1-25 W	-36 dBm < 1 GHz -30 dBm > 1 GHz	-36 dBm < 1 GHz -30 dBm > 1 GHz
25-45 W	-26 dBm	-26 dBm
Adjacent Channel Power:	-60 dB (12.5 kHz) -70 dB (25 kHz)	-60 dB (12.5 kHz) -70 dB (25 kHz)
Audio Response:	TIA603	TIA603
Audio Distortion:	3% typical	3% typical
FM Modulation:	11K0F3 (12.5 kHz) 16K0F3E (25 kHz)	11K0F3 (12.5 kHz) 16K0F3E (25 kHz)

CM200/CM300 Mobile Military Standards

	810C		810D		810E	
	Methods	Procedures	Methods	Procedures	Methods	Procedures
Temperature Shock:	503.1	I	503.2	I	503.3	I
Solar Radiation:	505.1	I	505.2	I	505.3	I
Rain:	506.1	II	506.2	II	506.3	II
Salt Fog:	509.1	I (48 Hours)	509.2	I (48 Hours)	509.3	I (48 Hours)
Water & Dust Intrusion:	510.1	I	510.2	I	510.3	I
Vibration:	-	-	514.3	I, Cat. 1	514.4	I, Cat. 1
Shock:	516.2	I, III	516.3	I, V	516.4	I, V

Environmental Specifications

Operating Temperature:	-30° C to +60° C
Storage Temperature:	-40° C to +85° C
Thermal Shock:	-40° C to +80° C
Humidity:	95% RH @ 8 Hour
Water & Dust Intrusion:	IP 54
Packing Test:	Impact test

These documents can be found in the Resource Center at

<https://www.motorola.com/businessonline>

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REV 1-11/04

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