# CM200<sup>TM</sup>

### Mobile Two-way Radio





- Rotary on/off/volume control
- Up/down channel selector buttons
- Red/yellow/green LED indicators
- 1-character numeric display
- Die-cast housing with polycarbonate outer casing
- 2 programmable buttons: customize shortcuts for up to 4 favorite features with a short/long press

#### All CM200 models include:

- Standard or compact microphone
- Standard or low profile installation bracket
- Standard power cable
- Safety Manual
- Two-year warranty

#### CM200 Mobile:

Features

- 4 Channels
- Audio Indicator Tones
- 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 Include:
   42 standard TPL codes, 84 standard and non-standard DPL codes
- Single Priority Scan
  Listen for activity on multiple channels
- Quik-Call<sup>TM</sup> Il Decode Includes: Selective Call: Allows calls from a specific group/individual

Call Alert: Notification of calls from a specific group/individual 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

#### Programmable Features: Choose up to 4

- Scan On/Off
- High/Low Power
- Repeater Talkaround
   Unit-to-unit communication, bypassing the repeater
- Local/Distance Mode
   Local reduces interference from nearby radios; distance helps improve range
- Tight/Loose Squelch
   Tight squelch helps minimize interference,
   and loose squelch helps weak signals be heard
- Nuisance Channel Delete
  Temporarily deletes a specific channel from scan mode
- Volume Set Sets volume level for radio speaker
- Silent Monitor/Open Squelch
   Silent monitor causes radio to remain silent;
   open squelch has audible "white noise"

when there is no channel activity

- VOX On/Off
   Enables/disables voice-operated transmit functionality for the current channel
- Escalert Increases alert volume of unanswered calls

## A compact radio that provides better and faster fleet productivity solutions

This radio features large

controls that are easy to grip or press even when wearing gloves. The powerful 4W 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 the 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. This design and simple operation make this radio ideal for retail, hospitality, manufacturing, delivery services and taxi and limousine companies.

GEN	ERAL SPECIFICATION	ONS			
	CM200™ VHF		CM200™ UHF		
Frequency	136-162 MHz 146-174 MHz		438-470 MHz		
Channel Capacity		4 Channels			
Technical RF Output Low Power High Power	1-25W 25-45W				
Dimensions: H x W x L	1.73 x 6.6	1.73 x 6.67 x 4.64 inches, 44 x 169 x 118mm			
Weight – Radio only		2.25 lbs, 1.02 Kg			
Current Drain Standby Rx @ rated, external 8 ohm speaker Transmit	0.3A 1.5A 7A (25W), 9.5A (45W)				
FCC Designation 136-162 MHz 146-174 MHz 438-470 MHz	ABZ99FT3049 (45W) AZ492FT3805 (25W) ABZ99FT3046 (45W)	77 (20VV), 5.5A (4	AZ492FT4856 (25W) ABZ99FT4048 (40W)		

F	RECEIVER SPECIFICATIONS			
	CM200 VHF	CM200 UHF		
Channel Spacing*	12.5/20/25 kHz			
Sensitivity: 12dB EIA SINAD (typic	AD (typical) 0.35 uV (12.5 kHz), 0.3 uV (25 kHz)			
Adjacent Channel Selectivity	65 dB (12.5 kHz) 75 dB (25 kHz)	60 dB (12.5 kHz) 70 dB (25 kHz)		
Intermodulation	65 dB (12.5 kHz) 75 dB (25 kHz)	60 dB (12.5 kHz) 70 dB (25 kHz)		
Frequency Stability: -30° C to +60	)° C +/-2.	5 ppm		
Spurious Rejection	-75 dB	-70 dB		
Rated Audio: Extended audio with	n 4 ohm speaker 4W internal,	13W external		
Audio Distortion @ Rated Audio	3%	typical		
Hum and Noise	-40 dB (12.5 kHz) -45 dB (12.5 kHz)	-35 dB (12.5 kHz) -40 dB (12.5 kHz)		
Audio Response	TIA603 a	TIA603 and ETS300		
Conducted Spurious Emission	-57 dBm < 1 GHz	-57 dBm < 1 GHz, -47 dBm > 1 GHz		

TRANSMITTER SPECIFICATIONS			
	CM200 VHF	CM200 UHF	
Channel Spacing*	12.5/20/25 kHz		
Frequency Stability: -30° C to +60° C	+/-2.5 ppm		
Modulation Limiting	+/-2.5 kHz (12.5 kHz) +/-4 kHz (20 kHz) +/-5 kHz (25 kHz)		
Conducted/Radiated Spurious Emission			
1-25 W	-36 dBm < 1 GHz, -30 dBm > 1 GHz		
25-45 W	-26 dBm		
Adjacent Channel Power	-60 dB (12.5 kHz)		
·	-70 dB (	25 kHz)	
Audio Response	TIA603		
Audio Distortion	3% typical		
FM Hum and Noise	-40 dB (12.5 kHz) -45 dB (25 kHz)	-35 dB (12.5 kHz) -40 dB (25kHz)	
FCC Modulation	11K0F3 (12.5 kHz) 16K0F3E (25 kHz)		

MOBILE MILITARY STANDARDS 810 C, D, and E							
	MIL-S	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E	
	Method	Procedures	Method	Procedures	Method	Procedures	
Temperature Shock	503.1		503.2		503.3		
Solar Radiation	505.1	-	505.2		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 and Dust Intrusion	510.1		510.2	1	510.3	1	
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		
Operating Temperature	-30° C to +60° C	- * Availability of new 25 kHz equipment may be
Storage Temperature	-40° C to +85° C	, , , , , , , , , , , , , , , , , , , ,
Thermal Shock	-40° C to +80° C	restricted due to Narrowbanding regulations in
Humidity	95% RH @ 8 Hour	your country. Please check with your frequency
Water and Dust Intrusion	IP 54	coordinator and/or regulatory agency for the
Packing Test	Impact test	latest information on Narrowbanding.

#### **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.

All specifications subject to change without notice.

