



We Hear You

GM338 & GM398 Conventional MDC Mobile Radio

Versatility & Sophistication on the Move



GM338 and GM398 Professional Mobile Radios

WE HEAR YOU

Motorola GM338 and GM398 Conventional MDC Mobile

In a rapidly changing market, instant communication and versatile mobile communication solutions are critical to the success of your business. With Motorola's GM338 & GM398 mobile radios, you can now enjoy immediate and reliable communication to keep your mobile teams working efficiently.

Enhanced Signalling Features for GM338 & GM398

- **PTT ID** - Enables the transmission of caller ID and allows users to identify incoming callers.
- **Selective Radio Inhibit** - Should the radios be stolen or are missing, selective radio inhibit can remotely deactivate the radios, providing greater security.
- **Call Alert** - The radio emits an alert tone to notify individual users that someone is trying to reach them.
- **Voice Selective Call** - The radio receives and sends unique individual voice messages for privacy or group voice messages for improved productivity.
- **Radio Check** - This auto-check feature monitors if the radio is working or operating within range.
- **Emergency Signalling** - Sends help signals for added security.



GM398 (Actual Size)

GM338 & GM398 Conventional MDC Mobile Radio

GM338 & GM398 Common Key Features & Benefits

Advanced Signalling Capability

GM338 & GM398 support a comprehensive range of signalling schemes such as MDC1200, Private Line & Digital Private Line, Quick Call II and DTMF.

Excellent Audio Technology

Motorola's special voice compression and low level expansion technology ensures crisper, clearer and stronger audio quality, allowing you to communicate even in a noisy working environment.

Programmable Channel Spacing (12.5/20/25 kHz)

Both radios allow programmable channel spacing of 12.5/20/25kHz, offering flexibility and easy migration of channel spacing and protect your investment should the regulatory channel spacing requirement change.

Large Control Buttons

The intuitive driven menu together with the large control buttons on the front panel of the radio provide users easy navigation of menu and exit functions.

Dual Priority Scan

Both GM338 & GM398 support up to 16 scan lists, where each scan list can be assigned to any of the function buttons. The dual priority scan feature also allows frequent scanning of priority channels.

GM338 - Versatility on the Go

Perfect for growing organisations, the GM338's rich feature set enables it to meet your rapidly changing business needs - keeping users communicating at higher levels of efficiency.

GM338 Features & Benefits

4 Customised Buttons

Easy to use, users have the flexibility to dedicate the most useful operations to these specific buttons for instant one-touch access. The buttons can also be replaced with recognised symbols.

Optional Voice Storage

Through an optional voice storage board, the GM338's capabilities can be expanded to incorporate the recording & playback of messages, or personal memos for up to 120 seconds.

128 Channel Capacity

With a full 128-channel operating capacity, the GM338 conventional mobile allows users greater flexibility to program each channel individually for different power output, private line (PL)/Digital private line (DPL) for privacy call, as well as memory channel and busy channel lock out to enhance communication efficiency.

14 Characters 1-line Alphanumeric Display

The large alphanumeric display with icons such as signal strength indicator and caller identification makes it easy to read both text and icon displays.

Remote Mount Control Head

The remote mount control head can be mounted on the dash board without the radio chassis, ideal when space is a constraint.

Status Call/Messaging

Up to 16 pre-defined text messages can be assigned to status codes in the contact list, enabling users to send frequently used messages quickly, without the need to talk.

Covert Emergency Signalling

Smart Microphone programmability. Provides 'channel up channel down' functionality for added convenience.



GM398 - Sophistication on the Move

The GM398 mobile is fully equipped for organisations that require high levels of flexibility and functionality. The GM398 mobile builds on the benefits provided by the GM338 radio, taking its users to a whole new level of communication capability.

GM398 Features & Benefits

7 Customised Buttons

Easy to use, users can have the flexibility to assign their most useful operations to these specific buttons and replace them with recognised symbols.

160 Channel Capacity

The extensive 160-channel operating capacity on the GM398 mobile enables it to accommodate a vast number of users and work groups concurrently. Users can program each channel individually for different power output, private line (PL) or digital private line (DPL) for privacy call, as well as memory channel and busy channel lock out to enhance communication efficiency.

14 Characters 4-line Alphanumeric Display

The large alphanumeric display enables users to read up to 14 characters and 4 lines of text quickly. The display also features icons such as radio signal strength indicator and caller identification.

Full Keypad

The full alphanumeric keypad makes it easy to edit the list and enable quick entry of the desired channel number, call list address, status or message number.

Built-in Voice Storage

The built-in voice storage board provides users with a paperless notepad to store and retrieve messages. The radio performance is further enhanced through recording & playing back of important messages, or personal memos for up to 120 seconds.

General Specifications

	LOW BAND	VHF	UHF
Frequency Range	29.7-36MHz 36-42MHz 42-50MHz	136-174MHz	403-470MHz 450-527MHz
Frequency Stability (-30C to 60C, 25c Ref.)	± 5ppm	± 2.5ppm	± 2ppm
Channel Capacity	GM338: 128 channels GM398: 160 channels		
Power Output	40-60W	1-25W	1-25W
Power Supply	13.2 Vdc (10.8-15.6 Vdc) Negative Vehicle ground		
Channel Spacing	20kHz	12.5/20/25 kHz	12.5/20/25 kHz
Dimensions (L x W x H)			
GM338: (add 9mm for volume knob)	250mm x 179mm x 59mm	186mm x 179mm x 59mm	186mm x 179mm x 59mm
GM398: (add 7mm for volume knob)	240mm x 185mm x 72mm	188mm x 185mm x 72mm	188mm x 185mm x 72mm
Weight	2040gms (4.5 lbs)	1400gms (3.5 lbs)	1400gms (3.5 lbs)
Operating Temperature	-30 to +60 degC		
Sealing	Passes rain testing to IP54		
Shock and Vibration	Meets MIL-STD 810-C,D&E and TIA/EIA 603		
Dust	Meets MIL-STD 810-C,D&E and TIA/EIA 603		
Humidity	Meets MIL-STD 810-C,D&E and TIA/EIA 603		

Transmitter

	LOW BAND	VHF	UHF
Modulation Limiting	± 5.0 kHz	± 2.5kHz @ 12.5kHz ± 4.0 kHz @ 20kHz ± 5.0 kHz @ 25kHz	± 2.5kHz @ 12.5kHz ± 4.0 kHz @ 20kHz ± 5.0 kHz @ 25kHz
FM Hum & Noise	-40dB	-40dB @ 12.5kHz -45dB @ 20/25kHz	-40dB @ 12.5kHz -45dB @ 20/25kHz
Conducted/ Radiated Emissions	- 36dBm < 1 GHz - 30dBm > 1 GHz		
Adjacent Channel Power	- 70dB	- 60dB @ 12.5kHz - 70dB @ 20/25kHz	- 60dB @ 12.5kHz - 70dB @ 20/25kHz
Audio Response (300 to 3000Hz)	+1, -3dB		
Audio Distortion @ 1000Hz, 60% Rated Maximum Deviation	3%		

Receiver

	LOW BAND	VHF	UHF
Sensitivity (12dB SINAD)	0.25 uV	0.22 uV	0.22 uV
Intermodulation (EIA)	80dB	78dB @ 25kHz 78dB @ 20kHz 75dB @ 12.5kHz	75dB @ 25kHz 75dB @ 20kHz 75dB @ 12.5kHz
Adjacent Channel Selectivity	80dB	80dB @ 25 kHz 70dB @ 20 KHz 65 dB @ 12.5 kHz	75dB @ 25 KHz 70 dB @ 20 kHz 65 dB @ 12.5 kHz
Spurious rejection	80dB	80dB @ 20/25 KHz 75dB @ 12.5 KHz	75dB @ 20/25 kHz 70 dB @ 12.5 kHz
Rated Audio	3W Internal 7.5W & 13W External		
Audio Distortion @ rated audio	3% Typical		
Hum & Noise	- 45dB	- 40dB @ 12.5kHz - 45dB @ 20/25kHz	- 40dB @ 12.5kHz - 45dB @ 20/25kHz
Audio Response (300 to 3000Hz)	+1, -3dB		
Conducted Spurious Emission per FCC part 15	- 57dBm < 1 GHz - 47dBm > 1 GHz		

* Availability subject to country law and regulations / Specifications subject to change without notice.

All specifications shown are typical. Radios meet applicable regulatory requirements.

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