



# We Hear You

Motorola MCX760 and MCX780  
Professional Mobile Radio for  
MPT Trunking System

Smart Simplicity in Mobile Communications



MCX760 and MCX780  
Professional Mobile Radios for MPT Trunking System



# WE HEAR YOU

## Motorola MCX760 and MCX780 Professional Mobile Radio for MPT Trunking System

In today's public MPT1327 trunked network, Motorola offers a wide range of trunked mobile radios that enable small & large user groups to tap into the network's vast capabilities. To enable organisations to achieve high levels of efficiency & productivity, Motorola introduced its MPT-Trunked Professional Mobile Radio Series - MCX760 and MCX780.

The MCX760 & MCX780 are ideal solutions that allow you to stay in touch and in control of your communications management in national fleet transportation, logging, or mining operations.

Both MCX760 & MCX780 comply with the MPT1327 signalling standard and support major dialling plans such as MPT1343, RegioNet 43 and ANN. Both models are ideally suited for courier, airport, transportation, public safety and security services.



MCX780 Professional Mobile Radio (Actual Size)

# MCX760 & MCX780 Common Features & Benefits

## Excellent Audio Clarity

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

## Switchable Channel Spacing

The series allows programmable channel spacing of 12.5/20/20.5kHz, offering flexibility and easy migration of channel spacing, protecting your investment should your country's regulatory channel spacing requirement change.

## Intuitive Menu

The intuitive driven menu consists of features such as one-touch dialing and alphanumeric phonebook providing users easy management of the radio functionalities.

## Built-in Voice Storage

The built-in voice storage in both MCX760 & MCX780 provides users with a paperless notepad to store and retrieve messages.

## Dynamic Regrouping

Enables a field radio to be reassigned to flexible groupings over the air, without the necessity to return the radio to the workshop for reprogramming.

## Remote Mount Control Head

The remote mount control head can be mounted on the dashboard without the radio chassis. This is especially useful when space is a constraint.

## Status Call/Messaging

Up to 32 pre-defined text messages can be tagged to status codes in the contact list allowing users to send frequently used status messages quickly without the need to talk. The radios can also stored up to 10 unread status messages.

## Short Data Message

Enable users the flexibility to send and receive short data messages with a maximum of 20 characters per message.

## MCX760 - The Versatile Radio

Offering an expandable list of programmable features, the MCX760's flexibility enables it to grow with the organisation. The versatile MCX760 mobile will keep your productivity at its highest, no matter how fast your business grows.

## Large LCD Display

The large one-line alphanumeric display with icon such as radio signal indicator & caller identification makes it easy & clear to read both text and icon display

## 4 Customised Buttons

Easy to use, users have the flexibility to dedicate the most useful operations to these specific buttons for quick one-touch access.

## 4 Personalities

Radios are configurable for up to 4 personalities for MPT or conventional signalling.

## Missed Call

Ability to store up to 10 missed call entries, allowing the user to return the calls received, ensuring that important calls will not be missed.

## Contact list

Enable users easy access for up to 100 pre-programmed alphanumeric entries.

## MCX780 - The Sophisticated Radio

The MCX780 is for professionals who need to communicate using the advanced levels of MPT radio sophistication. It is fully equipped to handle sophisticated mixed voice and data operations for the most demanding day-to-day operations. The MCX780 mobile builds on features of the MCX760 mobile and take its users to a new level of communication capability.

## 7 Customised Buttons

Easy to use, users have greater flexibility to dedicate the most useful operations to these specific buttons for even more quick one-touch access.

## Large LCD Display

The large alphanumeric display allows users to read up to 4 lines of messages. The display also features a radio signal strength icon. The radio provides separate distinctive tones and alpha tagging for incoming calls, enabling both audio and text caller identification.

## 60 personalities

Radios are configurable for up to 60 personalities for MPT or conventional signalling, offering users the flexibility to meet diverse communication needs.

## Data Messaging and MAP27

MCX780 provides data messaging directly from the radio or via the optional MAP27 data interface. Users can send data messages either from the 32 pre-programmed status message in the contact list for instant communication or manually entered alphanumeric text from the keypad. It also enable users to store up to 10 data messages.

### Two-Year Warranty

Each Motorola radio is backed by a 2 year warranty on radio parts and labour (one-year warranty on the battery, charger, antenna and belt clip).



Stringent Motorola s Accelerated Life Testing simulating five years of hard use in real life, EIA RS-316B in Shock, Vibration, Dust, Humidity, IP54 for Sealing.



MIL-STD 810C, D and E  
Stamp of approval from the U.S. Military for use in rough environments.



ISO 9001 Standard  
Compliance with ISO 9001 Standard an international quality system assurance on design, development, production, installation and servicing of a product.

## General Specifications

	VHF	UHF
Frequency Range	136-174MHz	403-470MHz 450-527MHz
Frequency Stability (-30C to 60C, 25c Ref.)	+ 2.5ppm	+ 2ppm
Channel Capacity	16 channels per conventional mode	
Power Output	1-25W	
Power Supply	13.2 Vdc (10.8-15.6 Vdc) Negative Vehicle ground	
Channel Spacing	12.5/20/25 kHz	
Dimensions (L x W x H)		
MCX760:	186mm x 179mm x 59mm (add 9mm for volume knob)	
MCX780:	188mm x 185mm x 72mm (add 7mm for volume knob)	
Weight	1400gms (3.15 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

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

## Receiver

	VHF	UHF
Sensitivity (12dB SINAD)	0.30uV (0.22uV typical) 78dB @ 25kHz 78 dB @ 20kHz	75dB @ 25kHz 75dB @ 20kHz
Intermodulation (EIA)	75dB @ 12.5kHz	75dB @ 12.5kHz
Adjacent Channel Selectivity	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 @ 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	- 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.

Contact your Dealer today



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