Trunked Mobile Radio

Versatility & Sophistication on the Move

MCX760 / MCX780

MOTOROLA

Motorola MCX760 and MCX780
Professional Mobile Radio for MPT Trunking System

In today's 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. And to enable organisations to achieve high levels of efficiency & productivity, Motorola introduced its latest MPT-Trunked Professional Mobile Radio Series - MCX760 and MCX780.

Whether you are a courier service personnel where information direction is critical, or a police officer needing emergency backup at an accident scene, or from a transportation company that wants to improve its fleet management, both the MCX760 & MCX780 are solutions that let you stay in touch and in control.

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.

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 harsh environments.

Switchable Channel Spacing
The MCX760 & MCX780 allow programmable channel spacing of 12.5/20/25kHz, 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 with 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
Users have the flexibility to reassign the radios into new talkgroups for urgent communication via a console, eliminating the need to return the radios to the workshop for re-programming.

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 store 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.

COMMON FEATURES

- **Excellent Audio Clarity**

- **Switchable Channel Spacing**

- **Intuitive Menu**

- **Built-in Voice Storage**

- **Dynamic Regrouping**

- **Remote Mount Control Head**

- **Status Call/Messaging**

- **Short Data Message**

MCX780 - Sophistication on the Move

The MCX780 is for professionals who need advance level of communication. 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 higher 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 faster 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 that alerts users on the radio signal strength. The radio provides separate distinctive tones and alpha tagging for incoming calls, enabling both audio and text caller identification.

60 personalities
Radios can configure up to 60 personalities, with a maximum of 16 talkgroups or conventional channels, 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 enables users to store up to 10 data messages. Data message of any length can also be sent with optional MAP27 data interface.

MCX760

MCX780

MCX760 - Versatility on the Go

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 icons such as radio signal indicator & caller identification, makes it easy & clear to read both text and icon displays

4 Customised Buttons
Easy to use, users have the flexibility to dedicate the most commonly used fuctions to these specific buttons for quick one-touch access.

4 Personalities
Radios can configure up to 4 MPT personalities, with a maximum of 16 talkgroups or conventional channels.

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.

Enhance Your Radio's Capabilities
A comprehensive range of accessories is also available so that the radios can be customised to suit your needs. Adding the proper handset, speakers, microphones & mounting accessories can enhance your productivity. Motorola accessories are built with the highest quality standards and are specially engineered to assure maximum performance of your radio.
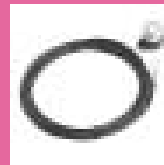

Keypad Microphone
AARMN4026

Microphone
PMMN4007

Remote Mount Kit
RLN4802

Push Button with Remote PTT
RLN4857

Foot Switch with Remote PTT
RLN4856

MCX760 & MCX780 Specifications

General Specifications	VHF	UHF
* Frequency Range	136-174MHz	403-470MHz450-527MHz
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: (add 9mm for volume knob)	186mm x 179mm x 59mm	
MCX780: (add 7mm for volume knob)	188mm x 185mm x 72mm	
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	
	± 4.0kHz @ 20kHz	
	± 5.0kHz @ 25kHz	
FM Hum & Noise	- 40dB @ 12.5kHz	
	- 45dB @ 20/25kHz	
Conducted/ Radiated Emiss	- 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 Max. Deviation	3%	

Receiver	VHF	UHF
Sensitivity (12dBSINAD)	0.30uV (0.22uV typical)	
Intermodulation (EIA)	78dB @ 25kHz	75dB @ 25kHz
	78dB @ 20kHz	75dB @ 20kHz
	75dB @ 12.5kHz	75dB @ 12.5kHz
Adjacent Channel Selectivity	80dB @ 25 kHz	75dB @ 25 KHz
	70dB @ 20 KHz	70dB @ 20 kHz
	65dB @ 12.5 kHz	65dB @ 12.5 kHz
Spurious rejection	80dB @ 20/25 KHz	75dB @ 20/25 kHz
	75dB @ 12.5 KHz	70dB @ 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	- 57dBm < 1 GHz	
per FCC part 15	- 47dBm > 1 GHz	

*   Availability subject to country's law and regulations / Specifications subject to change without notice.
      All specifications shown are typical. Radios meet applicable regulatory requirements.

	810 C		810 D		810 E	
Applicable MIL-STD	**Methods**	**Procedures**	**Methods**	**Procedures**	**Methods**	**Procedures**
Low Pressure	500.1	1	500.2	2	500.3	2
High Temp	501.1	1, 2	501.2	1, 2	501.3	1, 2
Low Temp	502.1	2	502.2	1, 2	502.3	1, 2
Temp. Shock	503.1	1	503.2	1	503.3	1
Solar Radiation	505.1	1	505.2	1	505.3	1
Rain	506.1	2	506.2	2	506.3	2
Humidity	507.1	2	507.2	2, 3	507.3	3
Salt Fog	509.1	1	509.2	1	509.3	1
Dust	510.1	1	510.2	1	510.3	1
Vibration	514.2	8, 10	514.3	1	514.4	1
Shock	516.2	1, 2, 5	516.3	1	516.4	1

Two-Year Warranty
Each Motorola radio is backed by a 2 year warranty on radio parts and labour

Motorola: Reliability & Quality

ACCELERATED LIFE TESTING
Stringent Motorola Accelerated Life Testing simulating five years of hard use in real life. EIA R5-3168 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 - on international quality system assurance on design, development, production, installation and servicing of a product.