

General Specifications (VHD/UHF)	MTX900	MTX960
*Frequency (MHz)	136-174 / 403-470 / 450-527 / 800 MHz	
Power Supply	Provided through rechargeable battery - 7.5V	
DIMENSIONS H x W x D (Radio footprint height excluding knobs)		
With Standard High Capacity NiMH Battery	137mm x 57.5mm x 37.5mm	
With Ultra High Capacity NiMH Battery	137mm x 57.5mm x 40.0mm	
With NiCD Battery	137mm x 57.5mm x 40.0mm	
With Lilon Battery	137mm x 57.5mm x 33.0mm	
WEIGHT		
With Standard High Capacity NiMH Battery:	420gm	428gm
With Ultra High Capacity NiMH Battery:	508gm	508gm
With NiCD Battery:	450gm	458gm
With Lilon Battery:	350gm	358gm
AVERAGE BATTERY LIFE @ 5/5/90 CYCLE		
	Low Power	High Power
With Standard High Capacity NiMH Battery	11 hours	8 hours
With Ultra High Capacity NiMH Battery	14 hours	11 hours
With NiCD Battery	12 hours	9 hours
With Lilon Battery	11 hours	8 hours
Sealing	Withstands rain testing per MIL STD 810 C/D/E and IP54	
Shock and Vibration	Protection provided via impact resistant housing exceeding MIL STD 810-C/D/E and TIA/EIA 603	
Dust and Humidity	Protection provided via environment resistant housing exceeding MIL STD 810 C/D E and TIA EIA603	

Transmitter	VHF/UHF	800MHz
*Frequency (MHz)	136-174, 403-470, 450-527 MHz	806-825 MHz
Frequency Separation	Full bandsplit	Full bandsplit
Channel Spacing	12.5/20/25 kHz	25 kHz
Frequency Stability (-30oC to 60oC, +25oC Ref.)	±2.5 ppm	±2.5 ppm
Power	1-5 W / 1-4 W	1-2.5 W
Modulation Limiting	±2.5 kHz @ 12.5 kHz ±4 kHz @ 20 kHz ±5 kHz @ 25 kHz	±5 kHz @ 25 kHz
FM Hum & Noise	-34 dB @ 12.5 kHz -38 dB @ 20 kHz -40 dB @ 25 kHz	-40 dB
Conducted/Radiated Emission	-66 dBw < 1 GHz -60 dBw > 1 GHz	-66 dBw < 1 GHz -60 dBw > 1 GHz
Adjacent Channel Power	-60 dBc @ 12.5 kHz -70 dBc @ 20/25 kHz	-70 dBc
Audio Response (from 6 dB/oct. pre-emphasis 300-3000 Hz)	+1 to -3 dB	+1 to -3 dB
Audio Distortion	3%	3%

Receiver	VHF/UHF	800MHz
*Frequency (MHz)	136-174, 403-470, 450-527 MHz	851-870 MHz
Frequency Separation	Full bandsplit	Full bandsplit
Sensitivity (12dB SINAD)	0.25 µV	0.25 µV
Intermodulation	-70 dB	-65 dB
Adjacent Channel Selectivity	-60 dB @ 12.5 kHz -70 dB @ 20/25 kHz	-70 dB
Spurious Rejection	-70 dB	-70 dB
Rated Audio	0.5 W	0.5 W
Audio Distortion @ Rated Audio	3% typical	3% typical
Hum and Noise	-34 dB @ 12.5 kHz -38 dB @ 20 kHz -40 dB @ 25 kHz	-39 dB
Conducted Spurious Emission	-57dBm < 1 GHz -47dBm > 1 GHz	-57 dBm < 1 GHz -47 dBm > 1 GHz

Portable Military Standards 810, C D and E						
	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	1	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	1, 2	506.2	1, 2	506.3	1, 2
Humidity	507.1	2	507.2	2, 3	507.3	2, 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, 4	516.4	1, 4

All Rx Hum & Noise numbers assume low level expander is used. Data for +25°C unless otherwise specified.
 * Availability subject to country law and regulations. Specifications subject to change without notice. All specifications shown are typical. Radios meet applicable regulatory requirements.

PRIVACY PLUS	MTX900	MTX960
Display	None	1 Line By 14
RADIO WIDE FEATURES	MTX900	MTX960
Caller ID/Alias Text	N/A	✓
Systems Compatibility		
Starsite	Yes	Yes
Smartnet	Yes	Yes
Maximum Number of Systems	10	10
Max Number of Talkgroups/Personality	15	15
Max Number of Personality	10	10
Alert Tones	✓	✓
Battery Gauge	N/A	✓
Out of Range	✓	✓
Time-Out-Timer	✓	✓
Modes	16	90
Variable RF Power Level	✓	✓
Transmit Inhibit on Busy	✓	✓
TRUNKING FEATURES	MTX900	MTX960
Trunked Signaling Type	II / Ili	II / Ili
Group Call	✓	✓
Talkgroup	✓	✓
Announcement Group	✓	✓
System Wide (Receive Only)	✓	✓
Affiliation/Defiliation	✓	✓
Failsoft	✓	✓
AMSS	✓	✓
Private Call	Decode	Unlimited
Call Alert	Decode	Unlimited
Telephone Interconnect	Decode	Unlimited
DTMF	N/A	✓
Selective Radio Inhibit	✓	✓
Emergency	✓	✓
CONVENTIONAL FEATURES	MTX900	MTX960
PL/DPL Signaling	✓	✓
Coded Squelch Operation (CSQ)	✓	✓
Monitor	✓	✓
SCAN FEATURES	MTX900	MTX960
Talkgroup Scan (Dual Mode)	✓	✓
Trunking Scan	✓	✓
Conventional Scan	✓	✓

Factory Mutual Approval

MTX900/MTX960 radio units are certified by Factory Mutual Approvals as intrinsically safe for use in Division 1, Class I, II, III, Groups C,D,E,F,G and Division 2, Class I, Groups A,B,C,D, when ordered with the Factory Mutual approved battery option.



Visit us at www.motorola.com/businessandgovernment
MOTOROLA, THE Stylized M Logo and MTX900 and MTX960 are registered in the U.S. Pat. & Tm. Office.
All rights reserved. All other product or service names are the property of their respective owners.

© 2005 Motorola, Inc.

AD3-04-010Rev.3

For more information, please contact:



Accelerated Life Testing

Motorola's Accelerated Life Testing simulates 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.



MOTOROLA
intelligence everywhere™



**THE POWER TOOL
FOR CONTACT & CONTROL**

MTX900/MTX960

MOTOROLA MTX900/MTX960

THE MTX900 & MTX960 PROFESSIONAL RADIO: TRUNKED SYSTEM RADIO SERIES

In today's dynamic environment, effective & instant communications are critical to the success of your business. Whether you are targeting to improve your operating efficiency, reducing the risks to employee safety or maximising your ability to respond to emergency situations, Motorola MTX900 series of professional radios are your ideal communication tools.

This series comes in 2 models. The MTX900 is a non-keypad model and the MTX960 is a keypad model.

Both models have its own distinctive, easy to use features; offering a wide range of capabilities for the Single Site Shared Mobile Radio to private security users. The distinctive features of the MTX960 keypad model is its 1x14 character LCD screen display & intuitive menu navigation that gives the user instant talk group identification.

COMMON KEY FEATURES FOR THE MTX900 NON-KEYPAD & MTX960 KEYPAD MODEL

AUDIO TECHNOLOGY

As with any radios, sound quality is critical for effective communications. Motorola's MTX900 and MTX960 Trunked system radio series can be heard in almost any environment because of LLE and noise cancelling microphone.

Wideband and Programmable Channel Spacing (12.5/20/25 kHz)

The wideband technology and programmable channel spacing of 12.5/20/25 kHz offer flexibility & easy migration should channel spacing requirement expand.

AUTOMATIC MULTIPLE SITE SELECTION (AMSS)

The AMSS feature extends communications beyond the reach of a single trunked site. In a system where multiple trunking sites are used to extend coverage; the AMSS will automatically switch the radio to a different site when the current site signal becomes too weak. Thus ensuring users continuous radio communications.

EMERGENCY ALARM*

An emergency function is provided to alert the dispatcher. This function is activated by pushing an easily accessible orange button on the top of the radio. These calls are processed by the trunking system with the highest priority to ensure that they get through as quickly as possible.

SELECTIVE RADIO INHIBIT

In situations when the radios have been stolen or are missing, the selective radio inhibit feature will enable the dispatcher to remotely disable the radios for greater security.

TALKGROUP SCAN

Provides effortless scanning combination of talkgroups and conventional channels for messages, and monitoring of channels in a multiple system environment.

DUAL MODE CAPABILITY

Enables user the convenience of selecting either both trunked or conventional operation providing maximum systems flexibility.

FAILSOFT OPERATION

In the event of a trunked system or central controller failure, radio conversation is still possible in failsoft mode. Upon indication of the central controller failure, the radio will automatically revert to a preassigned voice channel and operate in a non-trunked repeater mode.

LITHIUM ION BATTERY OPTION

The Lithium Ion battery option provides high capacity battery at a lighter weight; allowing users to communicate for a longer period of time.

MTX900 NON-KEYPAD RADIO - AFFORDABLE & EASY TO USE

The MTX900 is the affordable communication solution for professionals who required a rugged and reliable radio to stay in touch. This radio helps to enhance productivity, keeping users connected, whilst allowing them to concentrate on their jobs.

16 MODES

Allows for up to 16 modes to organise different user talkgroups to meet different communication needs.

MULTIPLE SYSTEM/TALKGROUP CAPABILITY

Provides operation & flexible access of up to 10 systems/15 talkgroups.

4 PROGRAMMABLE BUTTONS

The MTX900 can be programmed for common calls to be accessed as easy as a touch of a button.

LOW BATTERY WARNING

Pre-alert users when the battery is running low through the LED indicator and alert tone.

* Feature not available in some countries



Professional Radio for Privacy Plus Trunking Systems

MULTIPLE CALL - TYPES FLEXIBILITY

- Private Call Decode
Enables you to receive a one-to-one call from another radio user, assuring privacy when discussing sensitive issue.
- Call Alert Decode
Notification of 1 missed call via a series of audible signals, ensuring that a page can be received in the user's absence.
- Telephone Interconnect
Allows users the capability to receive an incoming telephone call through the trunked system, thus enhancing their communication coverage.

MTX960 KEYPAD RADIO - SMART & VERSATILE

The MTX960 is a smart choice for an organisation because it offers extra features to expand your communication needs and enhance your operational efficiency. Building on the basic features of the MTX900, the MTX960 has the following additional features.

LCD DISPLAY

The 14 character alpha-numeric display contains useful icons and information; such as instant talkgroup ID, radio signal strength indicator and a battery gauge icon are value-added features to optimise communication efficiency.

90 MODES

Allows for up to 90 modes to keep large diverse user talkgroups constantly in touch with each other.

INTUITIVE MENUS

Easy to use menus and an alpha-numeric phonebook/contact list make the radio simple and easy to use.

UNLIMITED PRIVATE CALL

In addition to receiving a one-to-one call, the MTX960 is also able to send One-to-one radio call through the pre-programmed list or via direct entry from the keypad.

UNLIMITED CALL ALERT

MTX960 will display the caller ID of the latest missed calls from the menu screen via a series of audible signals, ensuring that a page will be received. Users can also send their Call Alert page via pre-programmed list or direct keypad entry.

TELEPHONE INTERCONNECT

Allows user to receive and make telephone call through the trunked system, thus expanding their communication coverage. In addition, dialing can also be via the user-editable phone book or direct keypad entry.

MTX900 & MTX960 COMMON ACCESSORIES

ENHANCED YOUR RADIOS CAPABILITIES

A comprehensive range of accessories is also available so that Motorola MTX900 Privacy Plus radio Series can be customised to suite your unique applications. Adding the proper headsets, microphones, batteries, charger or carry case can further enhance the productivity of the two-way radio users.

Motorola accessories are built with the highest quality standards and are specially engineered to ensure maximum performance for your radio, no matter what profession you're in.



Surveillance Kit with Clear Acoustic Earpiece PLMN4607



Temple Transducer RMN4048



Travel Charger RLN4883



Multi-unit Charger



Helmet-com ENMN4018A



impres™ Smart Energy System



MTX900



MTX960

