



MTX850•LS  
MTX8250•LS  
Two-Way Radios

reliable



flexible



powerful

# MTX Series

Professional Radio  
For LTR® Systems



As Dedicated As You Are™

# Professional Radio



When you're completing a complicated repair job, the MTX850•LS and MTX8250•LS radios deliver the communication you need to take care of business—quickly and effectively.

#### COMMITMENT TO QUALITY

The exclusive **LS Quality Seal** signifies Motorola's new standard for 800MHz LTR® trunking—designed to help give you virtually unparalleled quality, versatility, and simplicity. That means your MTX850•LS and MTX8250•LS radios can deliver quality in design, construction, and performance; versatility with features you can customize to meet your needs; and simplicity that makes your radios remarkably easy to use and understand. It's all part of Motorola's unique ability to make the best even better.



On a construction site, you need to ensure workers have the right equipment at the right time. The MTX850•LS and MTX8250•LS two-way radios give you the power you need to get the job done.



## Motorola Two-Way Radio: Communication You Can Count On

Success in today's business world depends on exceptional performance. To stay ahead, you have to make every minute count—and every dollar. You also need fast, dependable access to the right people and information so you can get the job done. And that's exactly what two-way radio delivers. Efficient two-way radio helps you stay connected so you can maximize productivity and meet your customers' demands. By simply pressing a button, you can talk with one, one dozen, or one hundred people instantly. And when you choose a Motorola Professional Radio, you know you're getting a product specifically designed to meet your needs as a professional—a product that's **As Dedicated As You Are™**.

# Intelligent Radio

## So advanced, it practically thinks for you.

### MTX850•LS and MTX8250•LS: The Smart Choice for Your Business

#### POWERFUL

The innovative Motorola MTX850•LS and MTX8250•LS portable two-way radios deliver everything you need for great business communication. The exclusive Motorola LS Quality Seal™ lets you know that these radios can help enhance your interactive resources by operating effectively on 800 MHz LTR® systems.

Powerful, cost-effective LTR trunking provides a wider calling range, faster channel access, greater privacy, and higher user and talkgroup capacity—which means your MTX850•LS and MTX8250•LS radios have what it takes to help you stay in touch and on top.

#### FLEXIBLE

Both radios offer remarkable ease of use and unsurpassed functionality at the touch of a button:

- **Signaling features such as selective call and call alert** let you control your communication with extraordinary precision
- **Selectable scanning capabilities** give you the flexibility to program your MTX850•LS and MTX8250•LS radios to scan only the transmissions you want to hear
- **Voice storage capabilities** allow you to record incoming calls or personal messages
- **X-Pand™ audio enhancement** on the MTX8250•LS radio can reduce background noise and improve sound quality

- **User-friendly icons** on the large 14-character alphanumeric display provide at-a-glance understanding of the radios' features and commands
- **Easy reprogramming capabilities** help ensure that these radios will keep serving you effectively as your business grows and changes

#### RELIABLE

For more than 65 years, Motorola has been a leader in creating state-of-the-art wireless communications for people like you. Each MTX850•LS and MTX8250•LS radio is backed by a limited two-year\* warranty on parts and labor. So when you select the MTX850•LS or MTX8250•LS two-way radio, you know you'll experience the same superior quality you've come to expect from all Motorola products.

Making wise decisions is nothing new to you. So don't wait to make your next smart move. Contact your local Motorola representative today about the MTX850•LS and MTX8250•LS radios—and put the power of intelligent radio to work for your business.

\*Radio accessories are covered by Motorola's one-year accessories warranty.

## MTX850•LS

**1 Trunked Zone (with 16 talkgroups)  
Up to 16 Conventional Channels**

### Emergency Button

*Sounds an alarm in emergencies  
or can be programmed for  
specific features*

### MDC1200 Signaling (Receive) Features on LTR® Zones

- *Selective Call—Lets you  
receive calls from a specific  
group or individual*
- *Call Alert—Notifies unavailable  
users that someone is trying  
to reach them*

### X-Pand Audio Enhancement

*Crisper, clearer audio quality*

### System/All Group/ Auto Group Scanning

*Define the frequency  
and type of transmissions  
your radio scans*

### Telephone Interconnect Capability

*Receive phone calls  
using the radio*

### 4 Programmable Buttons

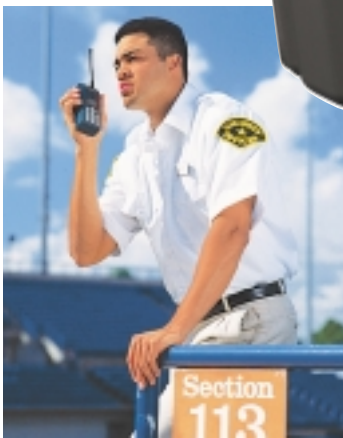
*Immediate access to your  
favorite features*

### Conventional Talkaround

*Unit-to-unit communications,  
bypassing the repeater*

**Small, lightweight, and durable**

**Voice storage capabilities  
(with option board)**



Fast, efficient communication can be crucial when you're overseeing security. The MTX850•LS and MTX8250•LS radios offer exactly what you need to stay in touch—anywhere, anytime.

**In addition to all the  
MTX850•LS model  
features, the MTX8250•LS  
model offers:**

**15 Trunked Zones (16 talkgroups each)  
16 Conventional Channels**

### Battery Gauge

*For at-a-glance battery life levels*

### LED Digital Alarm Clock

*Set time and reminder alarms  
as needed*

### 14-Character Alphanumeric Display with User-Friendly Icons

*Identifies trunked zones, talkgroups,  
and conventional channels*

### Control Buttons

*Easy management of menu,  
navigation, and exit functions*

### MDC1200 Signaling (Send/Receive) Features on LTR® Zones

- *Caller ID—Identifies incoming callers*
- *Selective Call—Lets you send calls  
to and receive calls from a specific  
group or individual*
- *Call Alert—Informs unavailable users  
that you're trying to reach them*
- *Radio Check—Notifies you whether  
another user's radio is activated*

### Front Panel

#### Programmable Phone List

*Store and retrieve your  
favorite phone numbers*

### Telephone Interconnect Capability

*Place and receive phone calls  
using the radio*

### 7 Programmable Buttons

*Immediate access to your  
favorite features*

### Home Channel Revert

*Automatic, one-button return  
to a preferred channel*

### User-Defined Lists

*Change scan, phone,  
and call lists on the fly*



## MTX850•LS and MTX8250•LS Accessories

The wide range of Motorola Original accessories available for your MTX850•LS and MTX8250•LS radios makes it easy to expand and customize their capabilities to fit your business requirements.

### AUDIO ACCESSORIES

Headsets in various styles give your MTX850•LS or MTX8250•LS radio enhanced sound clarity—especially useful in noisy environments. **Remote speaker microphones** let you use your radio without lifting it out of its carry case. **Comfortable earpieces** mute the radio speaker and channel the audio directly to your ear, particularly useful when privacy is important.



### BATTERIES AND CHARGERS

Motorola **high- or ultra-high-capacity batteries** boost the performance time of your MTX850•LS or MTX8250•LS radio to help ensure that it's ready whenever you need it. **Compact lithium ion batteries** are ideal for users who prefer a slimmer, lighter radio, and spark-free **Factory Mutual Approved batteries** are available for use in higher-risk environments. **Single and six-unit chargers** can charge spare batteries in one to three hours, minimizing radio down time.



### CARRY CASES AND BELT CLIPS

Handy leather or nylon carry cases and belt clips are designed to help protect your MTX850•LS or MTX8250•LS radio and hold it snugly in place, making it easy and comfortable to carry.



### VOICE STORAGE OPTION BOARD

This unique option board lets you store incoming calls or personal reminders on your radio.

## MTX850•LS and MTX8250•LS Specifications

### GENERAL SPECIFICATIONS

	800 MHz	MTX850•LS	MTX8250•LS
<b>Channel Capacity</b>			
Trunking zone capacity:		1	15
Trunking talkgroup capacity:		16*	16 (per zone)
Conventional channel capacity:		16*	16
<b>Power Supply</b>			
Rechargeable battery	7.5V		
<b>Dimensions</b>			
With NiMH High Capacity Battery	5.40" x 2.26" x 1.50" (137.0 x 57.5 x 37.5 mm)		
With NiMH Ultra-High Capacity Battery	5.40" x 2.26" x 1.60" (137.0 x 57.5 x 40.0 mm)		
With NiCd Battery	5.40" x 2.26" x 1.60" (137.0 x 57.5 x 40.0 mm)		
With Lilon Battery	5.40" x 2.26" x 1.30" (137.0 x 57.5 x 33.0 mm)		
<b>Weight</b>			
With NiMH High Capacity Battery	15.0 oz. (420g)		
With NiMH Ultra-High Capacity Battery	17.5 oz. (500g)		
With NiCd Battery	15.8 oz. (450g)		
With Lilon Battery	12.5 oz. (350g)		
<b>Average Battery Life @ 5/5/90 Duty Cycle</b>	<b>Low Power</b>	<b>High Power</b>	
With NiMH High Capacity Battery	9 hrs	8 hrs	
With NiMH Ultra-High Capacity Battery	14 hrs	11 hrs	
With NiCd Battery	9 hrs	8 hrs	
With Lilon Battery	9 hrs	8 hrs	

\* trunking talkgroups and conventional channels combined cannot exceed 16

### TRANSMITTER SPECIFICATIONS

Specifications	800 MHz
Frequency Range**	
Transmit	806 - 821 MHz
Talkaround	851 - 866 MHz
Power Output	2.5 W (806 - 821 MHz) 2 W (851 - 866 MHz)
Frequency Stability (-30° C to +60° C, +25° Ref.)	± 2.5 ppm
Modulation Limiting	± 5 KHz @ 806 - 821 MHz
Emission (Conducted & Radiated)	-13 dBm per FCC
Channel Spacing	25 KHz
FM Hum & Noise (Companion Receiver)	-40 dB
Audio Response (from 6dB/octave pre-emphasis, 300-3000 Hz)	+1 to -3 dB
Audio Distortion	3%
FM Modulation	16KOF3E

\*\* Note: This equipment is not authorized by the FCC for public safety use in the 821-825 / 866 - 870 MHz band in the United States

### FOR MORE INFORMATION CONTACT:

### RECEIVER SPECIFICATIONS

Specifications	800 MHz
Frequency Range	851 - 866 MHz
Hum and Noise	-45dB
Sensitivity (12 dB SINAD) EIA	.35 µV
Channel Spacing	25 KHz
Intermodulation	-70 dB
Adjacent Channel Selectivity	-70 dB
Spurious Rejection	-70 dB
Rated Audio	0.5 W
Audio Distortion @ Rated Audio	3% typical
Audio Response (from 6dB/octave de-emphasis, 300-3000 Hz)	+1 to -3 dB
Conducted Spurious Emission	-57 dBm

### PORTABLE MILITARY STANDARDS 810 C, D, & E

Applicable MIL-STD	810C Methods	810C Procedures	810D Methods	810E Methods	810D/810E Procedures
Low Pressure	500.1	1	500.2	500.3	2
High Temperature	501.1	1,2	501.2	501.3	1,2
Low Temperature	502.1	2	502.2	502.3	1,2
Temperature Shock	503.1	1	503.2	503.3	1
Solar Radiation	505.1	1	505.2	505.3	1
Rain	506.1	1,2	506.2	506.3	1,2
Humidity	507.1	2	507.2	507.3	2,3
Salt Fog	509.1	1	509.2	509.3	1
Dust	510.1	1	510.2	510.3	1
Vibration	514.2	8,10	514.3	514.4	1
Shock	516.2	1,2,5	516.3	516.4	1,4

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-30 to +60° C
Storage Temperature	-55 to +85° C
Humidity	95% RH @ 8 Hr.
ESD	IEC 801-2 KV
Water Intrusion	IP54

### FACTORY MUTUAL APPROVALS

Factory Mutual has given the MTX850•LS and MTX8250•LS an intrinsically safe rating for use in classes I, II, III, Division 1, Groups C,D,E,F and G, as well as non-incendive use in Class 1, Division 2, Groups A, B, C and D on models ordered with the Factory Mutual option.



**MOTOROLA**



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