



MOTOROLA
intelligence everywhere™



Professional Series
Two-Way Radios and Accessories

HT1250·LS

VHF

HT1250·LS⁺

UHF
200 MHz
700 MHz

*TAKING TWO-WAY COMMUNICATION FARTHER
THAN EVER.*



HT1250-LS
with LTR® Trunking

Motorola Two-Way Radios: The Choice of Professionals

To succeed in today's fast-moving business world, you have to constantly explore new opportunities...push past barriers...and move faster and farther than your competition. You also need communication tools that can keep up the pace – and give you immediate, dependable access to the right people and information. That's the power of two-way radio.

Efficient and cost-effective, two-way radio helps maximize your productivity so you can get the job done. By simply pressing a button, you can connect with one, ten, or more people instantly. And when you choose a Motorola radio, you know you're getting a tool designed and built to meet your needs as a professional.

The Intelligent Radio – So Advanced, It Practically Thinks for You

A unique combination of high-level features plus the exceptional versatility of trunking make the HT1250•LS and the HT1250•LS⁺ portables a smart choice for your business communications. The HT1250•LS and the HT1250•LS⁺ radios incorporate LTR® trunking capabilities – providing wide calling range, fast channel access, great privacy, and high user and talkgroup capacity. The HT1250•LS⁺ also offers innovative PassPort® trunking. Ideal for users with growing communication needs, PassPort includes all the advantages of LTR trunking plus:

- Wide Area Coverage, Seamless Roaming – Automatic switching between networked PassPort sites lets you maintain constant communication over long distances without touching a button
- Exceptional Audio Quality – Received Signal Strength Indicator (RSSI) communication technology utilizes one of the strongest signals available, giving you optimal sound quality
- Superior System Access – Automatic site registration/deregistration reduces busy channels and enhances system efficiency
- Efficient Channel Expansion – Direct frequency assignment allows you to add channels and sites over the air without taking radios out of service
- Electronic Serial Number Protection – Keeps system resources available by helping to prevent unauthorized radio cloning
- Increased Flexibility – Access privileges by Mobile Identification Number* (MIN) allows radios to be directed to specific sites or talkgroups.

*Optional PassPort feature



Sophisticated Technology and Remarkable Ease of Use

The HT1250•LS and the HT1250•LS+ radios also deliver outstanding functionality at the touch of a button, including:

- Motorola's unique MDC1200 features* – including selective call, call alert, radio check, and caller ID – to let you control your transmissions with extraordinary precision
- Selective Call or Call Alert functionality in PassPort mode allows you to privately talk with or page a specific user.
- Selectable Scanning capabilities so you can scan only the transmissions you want to hear

- Voice Storage capabilities to let you record incoming calls or personal messages on your radio
- User-Friendly Icons on a large 14-Character Alphanumeric Display that make the radio's features and commands simple to understand
- X-Pand™ Audio Enhancement can help reduce background noise and improve sound quality

What's more, your HT1250•LS+ portables can be programmed with both LTR and PassPort trunking systems – allowing a smooth transition when your business requires a more extensive calling area for maximum communication efficiency. The radio also operates on 16 conventional channels.

*LTR and conventional modes only



Motorola – A Name You Know and Trust

For 75 years, Motorola has been a leader in creating state-of-the-art wireless communications for people like you. Each HT1250•LS and HT1250•LS+ radio is backed by a limited two-year* warranty on parts and labor. So when you select the HT1250•LS or HT1250•LS+ portable, you'll experience the same superior quality you've come to expect from all Motorola products.

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



HT1250•LS and HT1250•LS+ Radio Features

15 PassPort and/or LTR Zones (16 talkgroups each)*
16 or 32 Conventional Channels*

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

MDC1200 Signaling (Encode/Decode) Features on Conventional and LTR Zones*

- Caller ID – Identifies incoming callers
- Selective Call – Lets you call a specific group or individual
- Call Alert – Notifies unavailable users that you're trying to reach them
- Radio Check – Tells you whether another user's radio is activated
- Message – Allows you to send and receive pre-programmed messages

PassPort Selective Call or Call Alert*

Lets you initiate or receive a private call or a private page from a specific user

Quik Call II™ on Conventional Zones*

Send and receive information via tone or digital signals

Battery Gauge

For at-a-glance battery life levels

7 Programmable Buttons

Immediate access to your favorite features

Conventional Talkaround

Unit-to-unit communications, bypassing the repeater

Home Channel Revert

Automatic, one-button return to a preferred talkgroup or channel

User-Defined Lists

Change scan, phone, and call lists on the fly

Telephone Interconnect

Place and receive phone calls with the radio

Voice Storage

Record important messages or personal memos

Roam Request*

Optional manual initiation of roaming function

Roam Lock*

Optional manual lock of the radio onto a site

Additional HT1250•LS and HT1250•LS+ Portable Features

- Small, lightweight, and durable
- 12.5/25 kHz switchable channel spacing*
- LED digital alarm clock
- Operates on conventional, LTR and PassPort systems*

* Only available on certain models. Check with your Motorola Authorized Dealer for availability.

HT1250•LS HT1250•LS⁺

Radio Accessories

The wide range of Motorola Original™ accessories available for your HT1250•LS or HT1250•LS⁺ portable makes it easy to enhance your radio's capabilities to fit your specific business requirements. Listed below is just a portion of the accessory portfolio available for the HT1250LS and HT1250LS⁺. Call today for a complete accessory listing.

Talk However You Want

Ultra-Light Headset—ENMN4012

Ideal for low to moderate noise environments, this ultra-light, behind-the-head headset features a flexible boom microphone and in-line push-to-talk (PTT) switch.



Medium-Duty Headset—ENMN4016

This behind-the-head headset with a swivel boom microphone and in-line PTT switch provides 24 dB of noise reduction, especially useful in noisier environments.



Tactical Headband Style Headset—RMN4052

With the same high-clarity sound and noise reduction as the medium-duty headset, this headset also includes two microphones outside the earcups that suppress high db sounds by 24db and amplify low sounds up to five times (but never exceed 82 dB). Requires an RKN4097 adapter cable, ordered separately.



Ultra-Light Earpiece with Boom

Microphone—AARMN4017

This comfortable earpiece provides high-clarity, hands-free two-way communication in moderate noise environments.



Temple Transducer—RMN4048

This highly advanced headset rests on your temples without covering your ears. It converts two-way audio into sound vibrations, which are transmitted directly into your inner ear—so you hear radio messages without missing other sounds around you. Can be used with foam earplugs for 24 dB of noise reduction when hearing protection is required.



Remote Speaker Microphone—AAHMN9052

This microphone lets you communicate without removing your radio from the belt case or charger.

Noise-Canceling Remote Speaker Microphone—AAHMN9053

Helpful in noisy environments, this microphone reduces background sounds.

Take It With You

Hard Leather Keypad Case with Swivel—HLN9694

This form-fitting case gives you access to the keypad, display, and all buttons and knobs on your radio. The swivel makes it easy to remove the radio and case from your belt loop, allowing you to operate the radio without taking it from the case.



Power It Up

Rapid Multi-Unit Charger—AAHTN3003

Ideal for multi-shift operations, this charger lets you concurrently charge 6 radios in just 2-3 hours. Convenient plug-and-play operation means you can charge batteries by themselves or while attached to a radio. And batteries left in the charger maintain a full charge continually—great for keeping spare batteries ready to go.



HT1250•LS and HT1250•LS⁺ Radio Specifications

GENERAL SPECIFICATIONS				
	VHF	200 MHz	UHF	700 MHz
Channel Capacity				
Trunking zone capacity	15	15	15	15
Trunking talkgroup capacity (per zone)	16	16	16	16
Conventional channel capacity	16 or 32*	16	16 or 32*	16
Power Supply	Rechargeable battery 7.5V			
Dimensions				
With NiMH High Capacity Battery	5.40" x 2.26" x 1.50" (137.0 mm x 57.5 mm x 37.5 mm)			
With NiMH Ultra-High Capacity Battery	5.40" x 2.26" x 1.60" (137.0 mm x 57.5 mm x 40.0 mm)			
With NiCd Battery	5.40" x 2.26" x 1.60" (137.0 mm x 57.5 mm x 40.0 mm)			
With Lilon Battery	5.40" x 2.26" x 1.30" (137.0 mm x 57.5 mm x 33.0 mm)			
Weight				
With NiMH High Capacity Battery	15.0 oz. (420 g)			
With NiMH Ultra-High Capacity Battery	17.5 oz. (500 g)			
With NiCd Battery	15.8 oz. (450 g)			
With Lilon Battery	12.5 oz. (350 g)			
Average Battery Life @ 5/5/90 Duty Cycle	Low Power	High Power		
With NiMH High Capacity Battery	11 hrs.	8 hrs.		
With NiMH Ultra-High Capacity Battery	14 hrs.	11 hrs.		
With NiCd Battery	12 hrs.	9 hrs.		
With Lilon Battery	11 hrs.	8 hrs.		
FCC Description	AZ489FT3794 (136-174 MHz) ABZ99FT3080 (217-218/219-222 MHz) AZ489FT4826 (403-470 MHz) AZ489FT4834 (450-512 MHz) ABZ99FT5000 (746-747/762-764/776-777/792-794 MHz)			

PORTABLE MILITARY STANDARDS 810 C, D, & E						
Applicable MIL-STD	810C		810D		810E	
	Methods	Procedures	Methods	Procedures	Methods	Procedures
Low Pressure	500.1	1	500.2	2	500.3	2
High Temperature	501.1	1,2	501.2	1,2	501.3	1,2
Low Temperature	502.1	2	502.2	1,2	502.3	1,2
Temperature Shock	503.1	1	503.2	1	503.3	1
Solar Radiation	505.1	1	505.2	1,2	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	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	IPX4

Factory Mutual Approvals
Factory Mutual has given HT1250•LS and HT1250•LS⁺ an intrinsically safe rating for use in Classes I, II, and III, Division 1, Groups C, D, E, F and G, as well as non-incendive use in Class I, Division 2, Groups A, B, C and D on models ordered with Factory Mutual option.

* Only available on certain models. Check with your Motorola Authorized Dealer for availability.

RECEIVER SPECIFICATIONS				
	VHF	200 MHz	UHF	700 MHz
Frequencies	136–174 MHz	217–218 MHz, 219–220 MHz, 220–222 MHz	403–470 MHz, 450–512 MHz	746–747 MHz, 762–764 MHz
Hum and Noise	-45 dB @ 12.5 kHz, -50 dB @ 25 KHz	-40 dB	-45 dB @ 12.5 kHz, -50 dB @ 25 KHz	-40 dB
Sensitivity (12 dB SINAD) EIA	.25 µV	0.3 µV (0.25 µV typical)		0.35 µV (0.3 uV typical)
Sensitivity (20 dB SINAD) ETS	.50 µV	.50 µV		
Channel Spacing	12.5/20/25 KHz	12.5 kHz	12.5/20/25 KHz	12.5 kHz
Intermodulation	70 dB	70 dB	70 dB	70 dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz/ 70 dB @ 25 kHz	60 dB (TIA 603) 40 dB (TIA 603-A)	60 dB @ 12.5 kHz/ 70 dB @ 25 kHz	60 dB (TIA 603) 40 dB (TIA 603-A)
Spurious Rejection	70 dB	70 dB	70 dB	70 dB
Rated Audio	0.5W	0.5W	0.5W	0.5W
Audio Distortion @ Rated Audio	3% typical	3% typical	3% typical	3% typical
Audio Response	+1 to -3 dB	+1 to -3 dB	+1 to -3 dB	+1 to -3 dB
Conducted Spurious Emission	-57dBm < 1 GHz	-57dBm < 1 GHz	-57dBm < 1 GHz	-57dBm < 1 GHz
FCC Part 15	-47dBm > 1 GHz	-47 dBm > 1GHz	-47 dBm > 1GHz	-47dBm > 1 GHz

TRANSMITTER SPECIFICATIONS				
	VHF	200 MHz	UHF	700 MHz
Frequencies	136–174 MHz	217–218 MHz (Talkaround), 219–220 MHz, 220–221 MHz (Talkaround) 221–222 MHz	403–470 MHz, 450–512 MHz	776–777 MHz, 792–794 MHz, 746–747 MHz (Talkaround) 762–764 MHz (Talkaround)
Power Output	1–5 W	1 W or 5 W	1–4 W	1 W or 2.5 W
Frequency Stability	± 5 ppm @ 25 kHz (-30° C to +60° C, +25° Ref.)	± 2.5 ppm	± 5 ppm @ 25 kHz ± 2.5 ppm @ 12.5 kHz	± 1.5 ppm
Modulation Limiting	± 2.5 @ 12.5 kHz ± 4.0 @ 20 kHz ± 5.0 @ 25 kHz	± 2.5 kHz	± 2.5 @ 12.5 kHz ± 4.0 @ 20 kHz ± 5.0 @ 25 kHz	± 2.5 kHz
Conducted and Radiated Emissions	-36 dBm < 1 GHz -30 dBm > 1 GHz	-16 dBm	-36 dBm < 1 GHz -30 dBm > 1 GHz	-16 dBm (except – 40 dBm from 1559 to 1610 MHz)
Channel Spacing	12.5/20/25 kHz	12.5 kHz	12.5/20/25 kHz	12.5 kHz
FM Hum & Noise	-40 dB typical	-40 dB typical	-40 dB typical	-40 dB typical
Adjacent Channel Power	-60 dB @ 12.5, -70 dB @ 25 kHz	-60 dB	-60 dB @ 12.5, -70 dB @ 25 kHz	-60 dB
Audio Response	+1 to -3 dB	+1 to -3 dB	+1 to -3 dB	+1 to -3 dB
Audio Distortion	3% typical	3% typical	3% typical	3% typical
FM Modulation	11K0F3E (12.5 kHz) 16K0F3E (25 kHz)	11K0F3E	11K0F3E (12.5 kHz) 16K0F3E (25 kHz)	11K0F3E
Adjacent Channel Coupled Power	N/A	N/A	N/A	Complies with 47 CFR 27.53 (d) (1)

For more information, please contact:



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