



TWO-WAY RADIOS

### HT750: The Practical Radio

The HT750™ radio is the affordable solution for professionals who require a rugged and reliable radio to stay in contact. This practical radio can easily help increase productivity by keeping users communicating, while allowing them to concentrate on the job at hand. And with Motorola's unique X-Pand™ technology, audio quality is clean and crisp in most environments. With the HT750 radio, communication couldn't be easier.

## HT750

Portable Radio



**X-Pand Voice Compression**  
*Crisper, clearer audio quality*

**3 Programmable Side Buttons**  
*Easy access to favorite features*

**Adjustable Power Levels**  
*Saves battery life*

**Priority Channel Scan**  
*Frequently scan higher priority channels*

**Monitor/Permanent Monitor**  
*Allows continuous channel monitoring*

**Repeater Talkaround**  
*Unit-to-unit communications bypassing the repeater*

**4 or 16 Channels**

**Emergency Siren Button**  
*Alarm sounds when activated*

**Internal VOX**  
*Hands-free operation with headset*

**Escalator™ Call Features**  
*Ensures important signals are heard*

**Quik-Call II™ Signaling (Decode)**  
*Receive information via tone signals*

**MDC 1200 Signaling (Encode/Decode)**  
*Send push-to-talk radio ID or receive information via digital signal*

#### HT750 features

- Small, Lightweight and Durable
- 12.5/25 kHz Switchable Channel Spacing
- Battery Status Indicator
- Telephone Interconnect Capable
- Option Board Capabilities

As Dedicated As You Are  
**Professional Radio**

HT750  
HT750  
HT750

## Portable Two-Way Radio Specifications

General Specifications				
	Low Band		VHF	UHF
Channel Capacity	4 or 16			
Power Supply	Rechargeable battery 7.5V			
Dimensions With NiMH High Capacity Battery With NiMH Ultra-High Capacity Battery With NiCd Battery With Lilon Battery	5.40" x 2.26" x 1.50" (137.0 x 57.5 x 37.5 mm) 5.40" x 2.26" x 1.60" (137.0 x 57.5 x 40.0 mm) 5.40" x 2.26" x 1.60" (137.0 x 57.5 x 40.0 mm) 5.40" x 2.26" x 1.30" (137.0 x 57.5 x 33.0 mm)			
Weight With NiMH High Capacity Battery With NiMH Ultra-High Capacity Battery With NiCd Battery With Lilon Battery	15.0 oz. (420g) 17.5 oz. (500g) 15.8 oz. (450g) 12.5 oz. (350g)			
Average Battery Life @ 5/5/90 Duty Cycle	<b>Low Power</b>	<b>High Power</b>	<b>Low Power</b>	<b>High Power</b>
With NiMH High Capacity Battery	11 hrs	8 hrs	11 hrs	8 hrs
With NiMH Ultra-High Capacity Battery	14 hrs	11 hrs	14 hrs	11 hrs
With NiCd Battery	12 hrs	8 hrs	12 hrs	9 hrs
With Lilon Battery	11 hrs	7 hrs	11 hrs	8 hrs

Receiver			
Specifications	Low Band	VHF	UHF
Frequencies	29.7–42 MHz 35–50 MHz	136–174 MHz	403–470 MHz
Hum and Noise	-45 dB @ 20/25 kHz	-45 dB @ 12.5 kHz, -50 dB @ 25 kHz	
Sensitivity (12 dB SINAD) EIA	.30 µV	.25 µV	
Sensitivity (20 dB SINAD) ETS	.50 µV		
Channel Spacing	20/25 kHz	12.5/20/25 kHz	
Intermodulation	70 dB		
Adjacent Channel Selectivity	60 dB @ 12.5 kHz/70 dB @ 25 kHz		
Spurious Rejection	70 dB		
Rated Audio	0.5 W		
Audio Distortion @ Rated Audio	3% typical		
Audio Response (300 – 3000 Hz)	+1 to -3 dB		
Conducted Spurious Emission FCC Part 15	-57 dBm < 1 GHz -47 dBm > 1 GHz		

Transmitter				
Specifications	Low Band		VHF	UHF
Frequencies	29.7–42 MHz 35–50 MHz		136–174 MHz	403–470 MHz
Power Output	1–6 W		1–5 W	1–4 W
Frequency Stability (-30° C to +60° C, +25° Ref.)	±10 ppm		±5 ppm @ 25 kHz ±2.5 ppm @ 12.5 kHz	
Modulation Limiting	+5.0 @ 20 kHz		±2.5 @ 12.5 kHz/±4.0 @ 20 kHz/ +5.0 @ 25 kHz	
Spurs/Harmonics	-36 dBm < 1 GHz -30 dBm > 1 GHz			
Channel Spacing	20/25 kHz		12.5/20/25 kHz	
FM Hum & Noise	-40 dB typical			
Adjacent Channel Power	-60 dB @ 12.5, -70 dB @ 25 kHz			
Audio Response (300 – 3000 Hz)	+1 to -3 dB			
Audio Distortion	3%			
FM Modulation	25 kHz 16K0F3E	125 kHz 11K0F3E	25/30 kHz 16K0F3E	12.5 kHz 11K0F3E 25 kHz 16K0F3E

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

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	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

Factory Mutual Approvals	
Factory Mutual has given the HT750 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 the Factory Mutual option.	

Ask your dealer about the other  
HT Series Two-Way Radios that utilize  
exclusive **X-PAND** technology.



**MOTOROLA**

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