



# HT750™

## Professional Series Portable Radio

Operates on Conventional Systems in the UHF and VHF Bands

### Programmable Emergency Button

Sound alarm or alert dispatcher in emergency situation

### 16 Channels

### 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

### Internal VOX

Handsfree operation with headset

### Escalart™ Call Features

Ensures important signals are heard

### Quik Call II™ and MDC1200 Signaling:

Send and receive information in a variety of ways including:

- **Push-to-Talk ID (Encode)**  
Identify your outgoing calls
- **Selective Call (Decode)**  
Receive a call from a specific group or individual
- **Call Alert (Decode)**  
Receive alerts of incoming calls when you're a short distance away from your radio
- **Radio Check (Decode)** Lets others check your radio status
- **Emergency (Encode)**  
Sounds an alarm or alerts dispatcher in urgent situations
- **Selective Radio Inhibit (Decode)**  
Allows system owner to disable stolen or missing radios



## HT750 Affordable and Reliable

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



### 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 even in noisy environments. With the HT750 radio, communication couldn't be easier.

The HT750 also features a MSHA (Mine Safety and Health Administration) approved option for use in

underground gaseous mines containing methane. Locations within underground mining environments may require MSHA approved equipment and could pose a challenge for the use of communication devices by workers. The HT750 MSHA approved option, can help ensure your workers are able to communicate with one another – helping to maximize their safety within these environments. The HT750 MSHA approved option also extends to audio accessories, enabling hands-free communication with a dual muff heavy-duty headset (AARM4020) or remote speaker microphone (PMMN4027).

HT750™ PROFESSIONAL SERIES  
Portable Radio

GENERAL SPECIFICATIONS		ENVIRONMENTAL
	<b>VHF/UHF</b>	
HT750 Channel Capacity:	16	Operating Temperature*:
Power Supply:	Rechargeable battery	-30°C to +60°C
Dimensions:		Storage Temperature:
With NiMH MSHA Battery (NNTN7380):	5.40 x 2.26 x 1.75 in (137 x 57.5 x 44 mm)	-55°C to +85°C
Weight:		Humidity:
With NiMH MSHA Battery (NNTN7380):	16.6 oz. (470g)	95% RH @ 8 Hr.
Average Battery Life @ 5/5/90 Duty Cycle*:	Low High	ESD
With NiMH MSHA Battery (NNTN7380):	10 hrs 8 hrs	IEC 801-2 KV
FCC Description:	AZ489FT3794 (136-174 MHz), AZ489FT4826 (403-470 MHz), AZ489FT4834 (450-512 MHz)	Water Intrusion:
		IP54

\* Radio only. NiMH MSHA Battery -10°C to +60°C

RECEIVER		
	VHF	UHF
Frequencies:	136-174 MHz	403-470, 450-512 MHz
Hum and Noise:	-45dB @ 12.5kHz, -50dB @ 25kHz	-45dB @ 12.5kHz, -50dB @ 25kHz
Sensitivity (12dB SINAD): EIA	.25 -V	.25 -V
Sensitivity (20dB SINAD): ETS	.50 -V	.50 -V
HT750 Channel Spacing:	12.5/20/25kHz	12.5/20/25kHz
Intermodulation:	70dB	70dB
Adjacent Channel Selectivity:	60dB @ 12.5kHz/70dB @ 25kHz	60dB @ 12.5kHz/70dB @ 25kHz
Spurious Rejection:	70dB	70dB
Rated Audio:	0.5 W	0.5 W
Audio Distortion @ Rated Audio:	3% typical	3% typical
Audio Response: (300 - 3000 Hz)	+1 to -3dB	+1 to -3dB
Conducted Spurious Emission FCC Part 15:	-57dBm < 1 GHz, -47dBm > 1 GHz	-57dBm < 1 GHz, -47dBm > 1 GHz

TRANSMITTER				
	VHF		UHF	
Frequencies:	136-174 MHz		403-470, 450-512 MHz	
Power Output:	1-5 W		1-4 W	
Frequency Stability: (-30°C to +60°C, +25° Ref.)	±5 ppm @ 25kHz, ±2.5 ppm @ 12.5kHz		±5 ppm @ 25kHz, ±2.5 ppm @ 12.5kHz	
Modulation Limiting:	±2.5 @ 12.5kHz±4.0 @ 20kHz/+5.0 @ 25kHz		±2.5 @ 12.5kHz±4.0 @ 20kHz/+5.0 @ 25kHz	
Spurs/Harmonics:	-36dBm < 1 GHz, -30dBm > 1 GHz		-36dBm < 1 GHz, -30dBm > 1 GHz	
Channel Spacing:	12.5/20/25kHz		12.5/20/25kHz	
FM Hum & Noise:	-40dB typical		-40dB typical	
Adjacent Channel Power:	-60dB @ 12.5, -70dB @ 25kHz		-60dB @ 12.5, -70dB @ 25kHz	
Audio Response: (300 - 3000 Hz)	+1 to -3dB		+1 to -3dB	
Audio Distortion:	3% typical		3% typical	
FM Modulation:	12.5kHz	25/30kHz	12.5kHz	25kHz
	11KOF3E	16KOF3E	11KOF3E	16KOF3E

MILITARY STANDARDS 810 C, D, E			
	MIL-810C	MIL-STD 810D	MIL-STD 810E
	Method: Proc./Cat.	Method: Proc./Cat.	Method: Proc./Cat.
Low Pressure:	500.1: I	500.2: II	500.3: II
High Temp:	501.1: I, II	501.2: I, II	501.3: I, II
Low Temp:	502.1: II	502.2: I, II	502.3: I, II
Temp Shock:	503.1: I	503.2: I	503.3: I
Solar Radiation:	505.1: I	505.2: I	505.3: I
Rain:	506.1: I, II	506.2: I, II	506.3: I, II
Humidity:	507.1: II	507.2: II, III	507.3: II, III
Salt Fog:	509.1: I	509.2: I	509.3: I
Dust:	510.1: I	510.2: I	510.3: I
Vibration:	514.2: VIII, X	514.3: I	514.4: I
Shock:	516.2: I, II, V	516.3: I, IV	516.4: I, IV

**Mine Safety Health Administration Approvals**  
The HT750 portable radio is certified by Mine Safety Health Administration (MSHA) as intrinsically safe for use in methane air mixtures on models ordered with the MSHA option and battery.  
Approval number: 23-A080007-0

Version 2, 12 08

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R3-4-2017