SPECIFICATION SHEET

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

Escalert™ 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

United States Department of Labor
MSHA
Mine Safety and Health Administration

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).

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HT750™ PROFESSIONAL SERIES
Portable Radio

GENERAL SPECIFICATIONS

	VHF/UHF
HT750 Channel Capacity:	16
Power Supply:	Rechargeable battery
Dimensions: With NiMH MSHA Battery (NNTN7380):	5.40 x 2.26 x 1.75 in (137 x 57.5 x 44 mm)
Weight: With NiMH MSHA Battery (NNTN7380):	16.6 oz. (470g)
Average Battery Life @ 5/5/90 Duty Cycle*: With NiMH MSHA Battery (NNTN7380):	Low High 10 hrs 8 hrs
FCC Description:	AZ489FT3794 (136-174 MHz), AZ489FT4826 (403-470 MHz), AZ489FT4834 (450-512 MHz)

ENVIRONMENTAL

Operating Temperature*:	-30°C to +60°C
Storage Temperature:	-55°C to +85°C
Humidity:	95% RH @ 8 Hr.
ESD	IEC 801-2 KV
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 µV	.25 µV
Sensitivity (20dB SINAD): ETS	.50 µV	.50 µV
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 11KOF3E	25/30kHz 16KOF3E	12.5kHz 11KOF3E	25kHz 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

MSHA Approvals

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

MOTOROLA

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