**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, cleaner 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 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).
GENERAL SPECIFICATIONS

VHF/UHF

HT 750 Channel Capacity: 16

Power Supply: Rechargeable battery

Dimensions: With NiMH MSHA Battery (NNTN7380): 15.4 x 2.26 x 1.75 in (137 x 57.5 x 44 mm)

Weight: With NiMH MSHA Battery (NNTN7380): 16 oz (470g)

Average Battery Life: 15/5/90 Duty Cycle: Low High

FCC Description: A248F2T374H (136-174 MHz), A248F2T4826 (403-470 MHz), A248F2T4834 (450-512 MHz)

VHF/UHF O/E

Frequencies: 136–174 MHz 403–470, 450–512 MHz

Hum and Noise: -45dB @ 12.5 kHz, -50dB @ 25 kHz

Sensitivity (12dB SINAD): EIA: 25 µV 25 µV

Sensitivity (20dB SINAD): ETS: 50 µV 50 µV

HT 750 Channel Spacing: 12.5/20/25 kHz

Intermodulation: 70dB 70dB

Adjacent Channel Selectivity: 70dB 70dB

Spurious Rejection: 70dB 70dB

Power Output: 1–4 W

Frequency Stability: ±5 ppm @ 25 kHz, ±2.5 ppm @ 12.5 kHz

Modulation Limiting: ±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: 12.5/20/25 kHz

FM Hum & Noise: -40 dB typical

Adjacent Channel Power: -60 dB @ 12.5 kHz, -70 dB @ 25 kHz

Audio Response: (300 – 3000 Hz) +1 to -3 dB

Audio Distortion at Rated Audio: 3% typical

FM Modulation: 12.5 kHz 25/30 kHz

MIL-STD 810 C, D, E

MIL-810C MIL-STD 810D MIL-STD 810E

Low Pressure: 50.1: I 50.2: II 50.3: II

High Temp: 505.1: I 505.2: II 505.3: II


Shock: 518.2: I, II, III 518.3: I, IV 518.4: I, IV

Environmental

Operating Temperature: -30°C to +60°C

Storage Temperature: -55°C to +85°C

Humidity: 95% RH @ 85°F

ESD: MIL-STD 810D

Water Immersion: IP54

* Only NiMH MSHA Battery -10°C to +60°C

MILITARY STANDARDS 810 C, D, E


Low Pressure: 50.1: I 50.2: II 50.3: II

High Temp: 505.1: I 505.2: II 505.3: II


Shock: 518.2: I, II, III 518.3: I, IV 518.4: I, IV

MINITARY STANDARDS 810 C, D, E


Low Pressure: 50.1: I 50.2: II 50.3: II

High Temp: 505.1: I 505.2: II 505.3: II


Shock: 518.2: I, II, III 518.3: I, IV 518.4: I, IV

ELECTRICAL SPECIFICATIONS

Receivers

VHF UHF

Frequencies: 136–174 MHz 403–470, 450–512 MHz

Sensitivity (12dB SINAD): EIA: 0.25 µV 0.25 µV

Sensitivity (20dB SINAD): ETS: 0.50 µV 0.50 µV

HT 750 Channel Spacing: 12.5/20/25 kHz

Intermodulation: 70 dB 70 dB

Adjacent Channel Selectivity: 60 dB @ 12.5 kHz/70 dB @ 25 kHz

Spurious Rejection: 70 dB 70 dB

Power Output: 0.5 W

Audio Response: (300 – 3000 Hz) +1 to -3 dB

Audio Distortion at Rated Audio: 3% typical

FM Modulation: 12.5 kHz 25/30 kHz

MIL-STD 810 C, D, E


Low Pressure: 50.1: I 50.2: II 50.3: II

High Temp: 505.1: I 505.2: II 505.3: II


Shock: 518.2: I, II, III 518.3: I, IV 518.4: I, IV

ENVIRO MENTAL

Operating Temperature: -30°C to +60°C

Storage Temperature: -55°C to +85°C

Humidity: 95% RH @ 85°F

ESD: MIL-STD 810D

Water Immersion: IP54

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

MILITARY STANDARDS 810 C, D, E


Low Pressure: 50.1: I 50.2: II 50.3: II

High Temp: 505.1: I 505.2: II 505.3: II


Shock: 518.2: I, II, III 518.3: I, IV 518.4: I, IV

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