HT 1000
SYNTHESIZED FM PORTABLE RADIO

Creating New Horizons

VHF ▶ 5 to 1 Watts
▶ 136-174 MHz

UHF ▶ 4 to 1 Watts
▶ 403-470 MHz
▶ 450-520 MHz

800 ▶ 3 Watts
▶ 806-870 MHz

2 Channel Model
16 Channel Model

12.5/20/25/30 kHz
Channel Spacing
RSS Programmable Per Mode UHF/VHF

The HT 1000 portable series offers you small, rugged, economically packaged radios loaded with features never before offered in a Motorola HT portable product. In addition to the size, durability, and affordability advantages the HT 1000 radio offers, it also includes programmable function controls and radio-to-radio cloning for increased user flexibility. Of course, the HT 1000 radio family incorporates the quality and reliability you have come to expect from Motorola—the leader in FM two-way radio communications.
GENERAL FEATURES

All HT 1000 radios include the following hardware:

- Belt Clip and Antenna
- Three Side Programmable Buttons
- “Quick Disconnect” Accessory Port
- Rotary Channel Selector Knob
- Noise Canceling Microphone
- On/Off/Volume Knob
- Top Mounted Emergency Button
- Dual Charge High Capacity Battery
- Top Mounted Bi-Color LED Indicator
- Weather-Sealed Universal Connector
- 3-Position Programmable Toggle Switch

- Easy access controls
- Programmable buttons and switches

Full Band Operation
The HT 1000 radio features Motorola’s broadest band range. With “Full Band VHF,” a single model can operate from 136 to 174 MHz. The entire UHF band is covered with 2 models, and the 800 MHz band needs only one.

Enhanced Audio
The HT 1000 radio is one of the loudest portables ever developed by Motorola. Improved voice intelligibility at high volumes means less distortion and fewer miscommunications. The radio’s standard noise canceling microphone will minimize background noise.

Universal Connector
A weather-sealed connector allows all reprogramming, tuning and testing to be performed without opening the radio.

Radio-to-Radio Cloning
Using a simple cloning cable you can duplicate one radio’s operating parameters into another HT 1000 portable of the same sub-band.

Channel Scan Monitoring
Allows the radio to scan all of its operating channels. Channel Scan is capable of scanning for PL, DPL, Carrier Squelch, Quik-Call and Stat-Alert Selective Call, and can be configured for Non-Priority or Single Priority operation. The HT 1000 radio also includes Talk-back scan and nuisance channel delete capability where the user can temporarily delete an unwanted active channel from the scan list by simply pressing a button.

Adjustable Power Levels (UHF and VHF only)
The HT 1000 portable can be programmed to adjust RF power levels automatically on a mode slaved basis, or manually through operation of a switch. Variable RF power level provides the radio with the capability of having up to two power levels in one radio, and the capability of operating in high or low power on a per channel basis. The default power levels in VHF are 5 Watts (high) and 1 Watt (low), and in UHF are 4 Watts (high) and 1 Watt (low). The two power levels can be changed in the field by a service technician if other than the default settings are required.

Smart PTT-Busy Channel Lockout
Prevent users from "talking over" each other by restricting the user from transmitting if activity is detected on the channel. The radio will generate a continuous tone upon PTT depress if a transmission is not being allowed. Inhibit Transmit can be activated for any busy channel or only on a busy channel with a different squelch code. A quick-key over-ride option can work in conjunction with Smart PTT to allow the user to override the transmit inhibit state for times when transmission is critical.

Repeater and Talkaround Operation
Allows the user to choose operation through a repeater (where the transmit frequency is not equal to the receive frequency), or operation that bypasses a repeater and talks directly to another unit (Talkaround or Direct Operation). When the feature is mode slaved, the channel is programmed to operate either in the direct or repeat mode. Alternatively, the repeater/talkaround function can be programmed to the three position toggle switch where the user can select from the two operating choices in the field.

Coded Squelch Operation
Allows the user to operate a radio in Carrier Squelch, PL or DPL mode. All of these different modes of operation are available, with 16 unique decode codes and 16 unique encode codes all possible in a single radio unit. When in the Carrier Squelch mode, the user will hear all traffic on the selected channel, but when operating in PL or DPL modes, the user will hear only those messages that are intended for his group. Tone PL and Digital PL can be mixed on a per channel basis.
GENERAL FEATURES

Side mounted, weather sealed universal connector

Low Battery Alert
The LED indicator will blink red if the battery falls below a specified voltage level while in the transmit mode. The radio can also be programmed to sound an alert tone if the low battery condition is detected during transmission or periodically while in the stand-by mode.

Time-Out Timer
Limits the amount of time the radio user can continuously transmit on a channel. If the user holds down the PTT longer than the preprogrammed limit, the radio automatically emits a warning tone, then stops transmitting, and will generate a talk prohibit tone until the PTT is released.

SIGNALLING FEATURES

MDC-1200 STAT-ALERT Signalling
Unit ID and Emergency—Each HT 1000 radio can be programmed to send a unique digital identification code at the beginning of each transmission, at the end, or both. This ID may be combined with an emergency alarm that is activated by an emergency button on that top of the radio. The dispatcher cannot only quickly identify the radio user, but can also receive nearly instant clear indication of critical situations.

Call Alert and Selective Call Decode
Provides an efficient way for the dispatcher to initiate a page or a voice page message to an individual or a group. It is a convenient way to eliminate the need for users to listen to traffic that does not concern them. When the user receives a Call Alert, the radio will continuously generate a series of four tones as well as flash the green LED until the user takes action. When the user receives a Selective Call, the radio will generate alert tones, flash the green LED, and will unmute so an incoming message can be heard.

Radio Check
Allows the dispatcher to determine if the radio unit is on the air and within communications range without disturbing the radio operator.

Tilt Switch
When equipped with the optional Tilt Switch accessory, the HT 1000 radio will send an emergency transmission after a preprogrammed delay time if the radio is tilted greater than 60°.

Quik-Call Signalling
Selective Signalling Decode
Provides another convenient way for the dispatcher to initiate a voice page message to an individual or a group. When the user receives a Selective Call, the radio will generate alert tones, flash the green LED, and will unmute so an incoming message can be heard. The radio stays unmuted until the user takes action. A Quik-Call II signal can be Individual Call, a long Tone B Group Call or a Dual Call.

OPTIONAL FEATURES

Touch Code Signalling
Any HT 1000 radio with the appropriate TOUCH-CODE signalling option can encode Dual Tone Multi-Frequency tones via a keypad. This will allow a user to access the land-line phone network or to operate remote control devices.

Intrinsically Safe
The HT 1000 portable, when ordered with the Intrinsically Safe option and used with Motorola’s FM batteries, is approved for operation in hazardous atmospheric environments by the U.S. Factory Mutual agency.

ALT
The HT 1000 portable will keep working under harsh conditions. Like all Motorola products, the radio is subjected during the design stages to our unique Accelerated Life Test (ALT) which simulates five years of intensive field stress.
**SPECIFICATIONS**

**HT1000**

**Synthesized FM Portable Radio**

### TYPICAL PERFORMANCE SPECIFICATIONS**

<table>
<thead>
<tr>
<th>General</th>
<th>Model Number</th>
<th>Channels</th>
<th>Bandsplit</th>
<th>RF Power Output</th>
<th>Display/Keypad</th>
</tr>
</thead>
<tbody>
<tr>
<td>VHF Models</td>
<td>H01KDC9A2A N</td>
<td>2*</td>
<td>136-174 MHz</td>
<td>1 to 5 Watts</td>
<td>None/Optional</td>
</tr>
<tr>
<td></td>
<td>H01KDC9A3 A</td>
<td>16</td>
<td>136-174 MHz</td>
<td>1 to 5 Watts</td>
<td>None/Optional</td>
</tr>
<tr>
<td>UHF Models</td>
<td>H01RDC9A1 N</td>
<td>2*</td>
<td>403-470 MHz</td>
<td>1 to 4 Watts</td>
<td>None/Optional</td>
</tr>
<tr>
<td></td>
<td>H01RDC9A3 A</td>
<td>16</td>
<td>403-470 MHz</td>
<td>1 to 4 Watts</td>
<td>None/Optional</td>
</tr>
<tr>
<td></td>
<td>H015SDC9A1 N</td>
<td>2*</td>
<td>450-520 MHz</td>
<td>1 to 4 Watts</td>
<td>None/Optional</td>
</tr>
<tr>
<td></td>
<td>H015SDC9A3 A</td>
<td>16</td>
<td>450-520 MHz</td>
<td>1 to 4 Watts</td>
<td>None/Optional</td>
</tr>
</tbody>
</table>

| 800 Models | H01UC9A3 A | 16 | 806-870 MHz | 3 Watts | None/Optional |

### Power Supply:

Provided through one rechargeable nickel cadmium battery.

### Dimensions Note:

All depth and width dimensions reflect measurements taken at the widest points on the radio unit. They do not reflect every width and depth point on the radio.

*2 channel models are not compatible with MTVA or Public Safety microphone.

---

**Radio Dimensions**

<table>
<thead>
<tr>
<th>Radio Only</th>
<th>Radio Only</th>
<th>Radio Only</th>
<th>With High Capacity Battery</th>
<th>With Ultra High Capacity Battery</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.30˝ (H) x 2.34˝ (W) x 1.54˝ (D)</td>
<td>6.30˝ (H) x 2.34˝ (W) x 1.49˝ (D)</td>
<td>18.3 oz.</td>
<td>19.4 oz.</td>
<td></td>
</tr>
</tbody>
</table>

### Battery Life @ 5/5/90

- VHF @ SW: 8.0 Hours
- VHF @ 1W: 11.0 Hours
- UHF @ 4W: 8.0 Hours
- UHF @ 1W: 11.0 Hours
- 800 @ 3W: 9.0 Hours

### Ultra High Capacity Battery:

- VHF Models: 9.0 Hours
- UHF Models: 12.0 Hours
- 800 Models: 12.0 Hours

### With High Capacity Battery:

- UHF Models: 11.0 Hours
- 800 Models: 9.0 Hours

### Radio Weight:

<table>
<thead>
<tr>
<th>Radio Only</th>
<th>With High Capacity Battery</th>
<th>With Ultra High Capacity Battery</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.2 oz.</td>
<td>19.4 oz.</td>
<td>19.4 oz.</td>
</tr>
</tbody>
</table>

### Dimensions Note:

All depth and width dimensions reflect measurements taken at the widest points on the radio unit. They do not reflect every width and depth point on the radio.

**Service Organizations.**

Authorized independent distributor service organizations are serviced throughout the world by a wide network of company or authorized independent distributor service organizations. Wherever Motorola sells, our product is backed by service. Our products are serviced throughout the world by a wide network of company or authorized independent distributor service organizations.

**SUPPORT SERVICES**

Wherever Motorola sells, our product is backed by service. Our products are serviced throughout the world by a wide network of company or authorized independent distributor service organizations.

**Schaumburg, Illinois 60196**

Outside the U.S. and Canada call: (847) 538-6602

In the U.S. call: 1-800-247-2346

In Canada call: 1-800-268-5758

©1992 by Motorola, Inc.

Printed in U.S.A. 2895 Merit

Produced by Customer Communications.

Motorola is an Equal Employment Opportunity/Affirmative Action Employer.

**U.S. Military Spec 810C**

<table>
<thead>
<tr>
<th>Type</th>
<th>Method</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Pressure</td>
<td>500.1</td>
<td>I</td>
</tr>
<tr>
<td>High Temperature</td>
<td>501.1</td>
<td>I, I (Cat. A), I (Cat. B)</td>
</tr>
<tr>
<td>Low Temperature</td>
<td>502.1</td>
<td>I, I (Cat. C), I (Cat. D)</td>
</tr>
<tr>
<td>Solar Radiation</td>
<td>503.1</td>
<td>I, I (Cat. A), I (Cat. B)</td>
</tr>
<tr>
<td>Rain</td>
<td>505.1</td>
<td>I</td>
</tr>
<tr>
<td>Humidity</td>
<td>506.1</td>
<td>I</td>
</tr>
<tr>
<td>Salt Fog</td>
<td>509.1</td>
<td>I</td>
</tr>
<tr>
<td>Vibration</td>
<td>510.1</td>
<td>I</td>
</tr>
<tr>
<td>Shock</td>
<td>512.1</td>
<td>I</td>
</tr>
</tbody>
</table>

### U.S. Military Spec 810D

<table>
<thead>
<tr>
<th>Type</th>
<th>Method</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Pressure</td>
<td>500.2</td>
<td>I</td>
</tr>
<tr>
<td>High Temperature</td>
<td>501.2</td>
<td>I (Cat. A), I (Cat. B)</td>
</tr>
<tr>
<td>Low Temperature</td>
<td>502.2</td>
<td>I (Cat. C), I (Cat. D)</td>
</tr>
<tr>
<td>Solar Radiation</td>
<td>503.2</td>
<td>I (Cat. A), I (Cat. B)</td>
</tr>
<tr>
<td>Rain</td>
<td>505.2</td>
<td>I</td>
</tr>
<tr>
<td>Humidity</td>
<td>506.2</td>
<td>I</td>
</tr>
<tr>
<td>Salt Fog</td>
<td>509.2</td>
<td>I</td>
</tr>
<tr>
<td>Vibration</td>
<td>510.2</td>
<td>I</td>
</tr>
<tr>
<td>Shock</td>
<td>512.4</td>
<td>I</td>
</tr>
</tbody>
</table>

### U.S. Military Spec 810E

<table>
<thead>
<tr>
<th>Type</th>
<th>Method</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Pressure</td>
<td>500.3</td>
<td>I</td>
</tr>
<tr>
<td>High Temperature</td>
<td>501.3</td>
<td>I (Cat. A), I (Cat. B)</td>
</tr>
<tr>
<td>Low Temperature</td>
<td>502.3</td>
<td>I (Cat. C), I (Cat. D)</td>
</tr>
<tr>
<td>Solar Radiation</td>
<td>503.3</td>
<td>I (Cat. A), I (Cat. B)</td>
</tr>
<tr>
<td>Rain</td>
<td>505.3</td>
<td>I</td>
</tr>
<tr>
<td>Humidity</td>
<td>506.3</td>
<td>I</td>
</tr>
<tr>
<td>Salt Fog</td>
<td>509.3</td>
<td>I</td>
</tr>
<tr>
<td>Vibration</td>
<td>510.3</td>
<td>I</td>
</tr>
<tr>
<td>Shock</td>
<td>512.4</td>
<td>I</td>
</tr>
</tbody>
</table>

Specifications subject to change without notice.