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User Guide



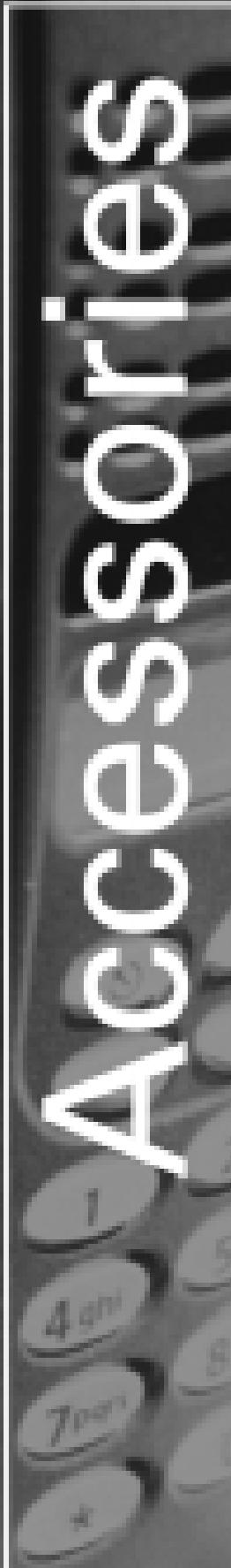
MOTOROLA

Multi-Unit Chargers  
Cargadores múltiples  
Carregadores múltiplos  
Chargeurs multiples

HTN9005 Series



Professional Radio



# **IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS**

English

**This document contains important safety and operating instructions. Please read these instructions carefully and save them for future reference.**

Before using the battery charger, read all the instructions and cautionary markings on (1) the charger, (2) the battery, and (3) on the radio using the battery.



## **WARNING**

1. To reduce risk of injury, charge only the rechargeable Motorola authorized batteries listed in Table 1. Other batteries may explode, causing personal injury and damage.
2. Use of accessories not recommended by Motorola may result in risk of fire, electric shock, or injury.
3. To reduce risk of damage to the electric plug and cord, pull by the plug rather than the cord when disconnecting the charger.
4. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in risk of fire and electric shock. If an extension cord must be used, make sure that the cord size is 18AWG for lengths up to 100 feet (30.48 m), and 16AWG for lengths up to 150 feet (45.72 m).

## WARNINGS (continued)



### WARNING

5. To reduce risk of fire, electric shock, or injury, do not operate the charger if it has been broken or damaged in any way. Take it to a qualified Motorola service representative.
6. Do not disassemble the charger; it is not repairable and replacement parts are not available. Disassembly of the charger may result in risk of electrical shock or fire.
7. To reduce risk of electric shock, unplug the charger from the ac outlet before attempting any maintenance or cleaning.

## OPERATIONAL SAFETY GUIDELINES

- Turn radio off when charging battery.
- This equipment is not suitable for outdoor use. Use only in dry locations/conditions.
- Connect equipment only to an appropriately fused and wired supply of the correct voltage (as specified on the product).
- Disconnect from line voltage by removing mains plug.
- The socket outlet to which this equipment is connected should be close by and easily accessible.
- In equipment using fuses, replacements must comply with the type and rating specified in the equipment instructions.

## OPERATIONAL SAFETY GUIDELINES (continued)

- Maximum ambient temperature around the power supply equipment must not exceed 40°C (104°F).
- Output power from the power supply unit must not exceed the ratings stated on the product label located on the bottom of the charger.
- Make sure the cord is located where it will not be stepped on, tripped over, or subjected to water, damage, or stress.

## MOTOROLA AUTHORIZED BATTERIES

The batteries listed in Table 1 are approved for use with the HTN9005 Series Multi-Unit Chargers.

*Table 1. Motorola Authorized Batteries*

| Kit (part) Number | Battery Chemistry/Description            |
|-------------------|--|
| HNN9008           | NiMH/High-Capacity                       |
| HNN9009           | NiMH/Ultra-High-Capacity                 |
| HNN9010           | NiMH/Ultra-High-Capacity, Factory Mutual |
| HNN9011           | NiCd/High-Capacity, Factory Mutual       |
| HNN9012           | NiCd/High-Capacity                       |
| HNN9013           | Lithium Ion                              |
| *JMNN4023         | Lithium Ion                              |
| *JMNN4024         | Lithium Ion                              |

\* Used with HTN9005 (C and later) Series Multi-Unit Chargers; not compatible with HTN9005 A and B Series.

## POWER SOURCES/POWER PLUGS

Contact your Motorola representative for the applicable power cord kit (power plug) for your power source application.

## OPERATING INSTRUCTIONS

Multi-unit chargers will charge only the Motorola authorized batteries listed in Table 1. Other batteries may not charge.

Multi-unit chargers can charge up to six of the batteries (in any combination) listed in Table 1. Each of the six battery charger pockets will accommodate either a radio with a battery attached, or a battery alone. **Prior to charging a battery with radio, turn the radio off.**

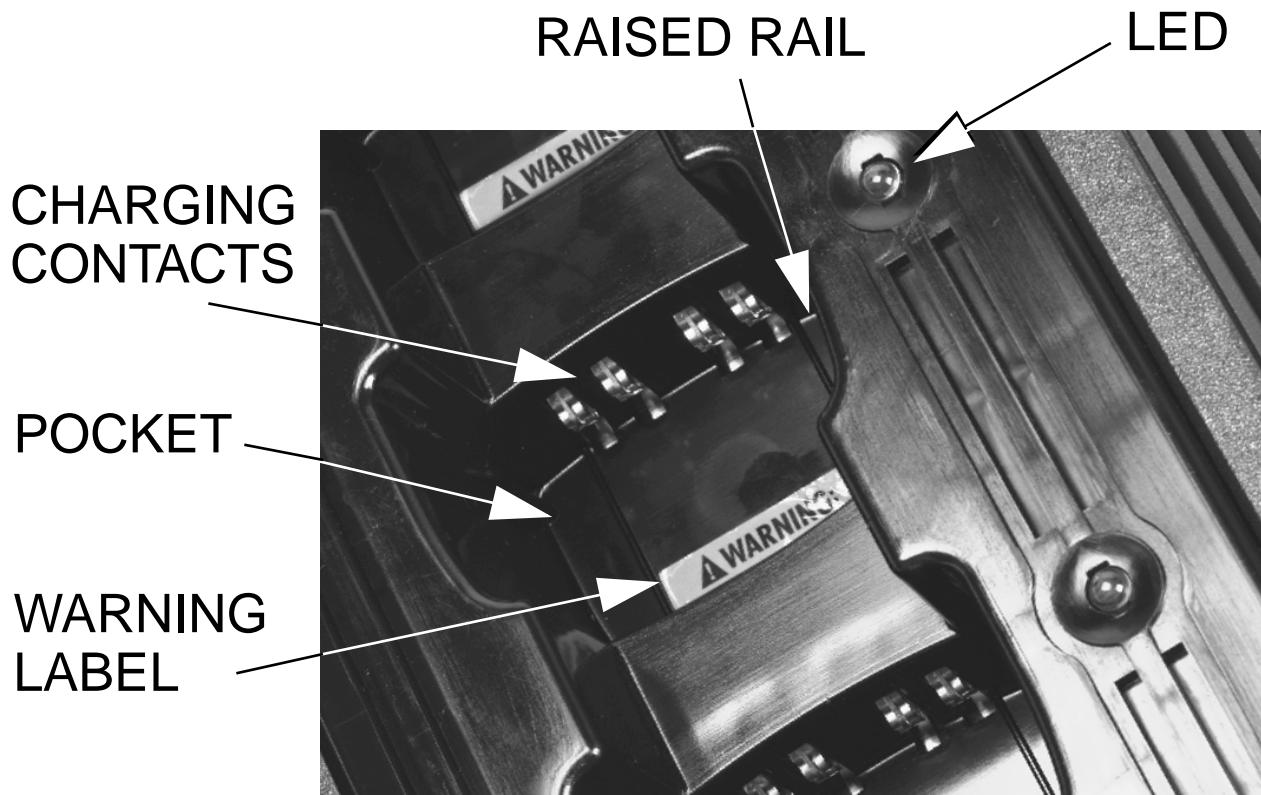
**Note:** The chargers are powered by an auto-ranging, switching power supply. The power supply will operate on input source voltage between 90 and 265 Vac.

To charge a battery, refer to Figure 1 (page 5) and use the following procedure:

1. Plug the power cord into an appropriate ac outlet. The LED of each of the six charger pockets will flash green once to indicate a successful power-up of that pocket.

**Note:** Although each charger pocket operates independently of the other, operation is identical. The following description applies to each of the six charger pockets.

2. Insert a battery, or radio with battery (radio turned off), into the charger's pocket by:
  - a. aligning the groove on each side of the battery with the corresponding raised rail on each side of the charger pocket
  - b. pressing the battery toward the rear of the pocket
  - c. sliding the battery into the charger pocket, ensuring complete contact between the charger and battery contacts



*Figure 1. Battery Charger (viewed from above)*

3. When the battery is properly seated in the pocket, the charger LED will light red to indicate that the battery is charging rapidly. When the battery is 90% charged, the LED will begin to flash green to indicate that the battery is trickle charging. When the battery is fully charged, the LED will change to a steady green light.

**Note:** Even though new batteries might prematurely indicate a full charge (steady green LED), charge the battery for 14 to 16 hours prior to initial use for best performance.

Batteries will charge best at room temperature.

## TROUBLESHOOTING

When troubleshooting, always observe the color of the LED:

*Table 2. LED Indications of Battery/Charger Status*

| LED Color          | Battery/Charger Status  |
|--------------------|---|
| No LED indication  | Battery is inserted incorrectly.  |
| Single flash green | Successful charger power-up   |
| Flashing red       | Battery is unchargeable or not making proper contact.                       |
| Steady red         | Battery is in rapid-charge mode.  |
| Flashing yellow    | Battery is in charger, not in rapid-charge mode, but waiting to be charged. |
| Flashing green     | Battery is charged (to 90% or greater capacity).                            |
| Steady green       | Battery is fully charged.   |

## No LED Indication?

1. Check that the radio with battery, or the battery alone, is inserted correctly (refer to step 2 on page 5).
2. Make sure that the power cord is plugged into an appropriate ac outlet.

## Flashing Red LED Indicator?

1. Remove the battery from the charger, and:
  - a. make sure that it is a Motorola authorized battery listed in Table1. Other batteries may not charge.
  - b. remove power from the battery charger and, using a clean dry cloth, clean the gold metal, charging contacts of the battery and charger.
2. Power up the charger and place the battery back into the charger pocket. If the LED indicator continues to flash red, replace the battery.

## Flashing Yellow LED Indicator?

- the battery temperature may be below 5°C (41°F) or above 40°C (104°F).
- the voltage may be lower than the predetermined threshold level for rapid charging.

**Note:** Rapid charging outside of the stated temperature and voltage limits can drastically reduce the life expectancy of the battery.

**Note:** When the battery charger detects the proper battery conditions, rapid charging begins automatically (steady red LED).

## **SERVICE**

Other than cleaning the battery charging contacts and dusting the unit with a clean, dry cloth, any maintenance, troubleshooting, service, or repair of the HTN9005 Series Multi-Unit Chargers should be performed only by authorized Motorola service personnel. A service manual is available to qualified Motorola service technicians.

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