

# MOTOROLA SOLUTIONS RECOMMENDATIONS FOR NEW BATTERY USE, STORAGE AND CARE

## **IMPORTANT BATTERY STORAGE, HANDLING AND CARE TIPS — PLEASE READ**

In compliance with the International Air Transport Association (IATA) policy, Motorola Solutions Inc. (MSI) ships all Li-Ion batteries at a state of charge less than 30% of their rated capacity.

### **DO NOT:**

- Store batteries with flammable materials.
- Disassemble, crush, puncture, shred, or otherwise change the form of your battery.
- Discard your battery in a fire.
- Dry a wet battery with an appliance or heat source, such as a hair dryer or microwave oven. If the radio battery contacts are wet, dry the battery contacts before attaching the battery to the radio.

### **ALWAYS DO:**

- Store batteries in a well ventilated, temperature (68°F/20°C to 86°F/30°C) and humidity (30%-60%) controlled environment.
- Use the battery in accordance with its water and dust Ingress Protection (IP) rating.
- Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects such as jewelry, keys or coins.
- Monthly inspect all battery contacts for dirt, grime and dust. Clean the contacts using a microfiber cloth or a lint free cloth. Reapply DeoxIT Gold on the radio side contacts using DeoxIT pen PN# G100P.

### **CARE & HANDLING:**

- Charge battery within 1 month of receipt.
- Always charge your battery using the approved Motorola charger. Charging in non-Motorola chargers may lead to reduced performance and battery damage.

## BATTERY INITIALIZATION / RE-CALIBRATION / RECONDITIONING RECOMMENDATIONS (FOR IMPRES BATTERY)

- For full IMPRES functionality, a new IMPRES battery must be initialized / calibrated by the IMPRES charger. The IMPRES charger will automatically detect the new IMPRES battery and automatically start the initialization / calibration process.
- IMPRES chargers will automatically re-calibrate / recondition IMPRES batteries periodically and users should not bypass the recalibration / reconditioning process.
- IMPRES Vehicular Chargers CANNOT re-calibrate / recondition IMPRES batteries, only IMPRES desktop chargers can perform re-calibration / reconditioning. Therefore, new IMPRES batteries must be initialized / calibrated in an IMPRES desktop charger and subsequent reconditionings / recalibrations must be performed in an IMPRES desktop charger.

## BATTERY STORAGE RECOMMENDATIONS

- New batteries that will be stored should be charged to greater than 50% (but less than 100%) state of charge within 1 month of receipt. Every 9 months, batteries must be recharged to greater than 50% state of charge.
- Batteries removed from service for storage should be charged to greater than 50% state of charge. Every 9 months, batteries must be recharged to greater than 50% state of charge.
- Do not store batteries attached to radios or host devices. This will minimize current drain on the battery.

Note: Batteries removed from storage may take several charge / discharge cycles to achieve their optimal capacity. One or two reconditioning cycles will accelerate capacity recovery.

## BATTERY DISPOSAL

All Motorola Solutions batteries contain recyclable materials. Recycling options available in your local area should be considered when disposing of this product. Do not discard the batteries into a fire.

## ACTIVE CIRCUITRY BATTERIES WITH SLEEP MODE

The batteries listed below have a SLEEP MODE feature that IMPROVES the Long-Term Storage capability. This allows the batteries to discharge at a very slow rate and allows it to remain dormant for up to 9 months.

## SLEEP MODE BATTERY KIT NUMBERS

NNTN8570B	IMPRES 2 Li-Ion 1250 mAh IECEx/ATEX
PMNN4547	IMPRES 2 Li-Ion 3100 mAh TIA 4950
PMNN4573	IMPRES 2 Li-ion 4800 mAh TIA 4950

IMPORTANT USER NOTE 1: Upon delivery, these batteries are in sleep mode; these batteries will not power a radio and are not fully charged. Do not awaken the batteries unless they are meant to be used. It is recommended that the battery be kept in sleep mode until the time the battery is deployed (put into initial use). Waking the batteries can be accomplished by placing the battery into any Motorola Solutions Inc. (MSI) charger.

IMPORTANT USER NOTE 2: Placing the battery into any MSI approved charger or an IMPRES Battery Data Reader will immediately wake up the battery. Do not place the battery into any approved MSI charger or IMPRES battery data reader to keep the battery in sleep mode.

## Sleep Mode Battery Storage Recommendations, using IMPRES 2 Multi-unit Chargers (MUC) programmed with Software version V1.10 or later

1. New batteries are in Sleep Mode when received.
2. If the batteries are to be directly placed into storage, **do not place the battery into any approved MSI charger or IMPRES Battery Data Reader.** These batteries can be stored for 9 months. At the end of the 9-month period, the batteries must be charged using an IMPRES 2 MUC in "Longterm Storage 75%" mode. Every 9 months, batteries must be recharged using an IMPRES 2 MUC in "Longterm Storage 75%" mode.
3. Batteries removed from service for storage should be charged using an IMPRES 2 MUC in "Longterm Storage 75%" mode. Every 9 months, batteries must be recharged using an IMPRES 2 MUC in "Longterm Storage 75%" mode.
4. Do not store batteries attached to radios or host devices. This will minimize current drain on the battery.

## **Sleep Mode Battery Storage Recommendations, using IMPRES 2 Single Unit Charger (SUC), IMPRES 1 MUC or SUC, or any Non-IMPRES charger**

1. New batteries are in Sleep Mode when received.
2. If these are to be directly placed into storage, do not place the battery into any approved MSI charger or IMPRES Battery Data Reader. These batteries can be stored for 9 months. At the end of the 9-month period, the batteries must be charged to 100% state of charge. Every 6 months, batteries must be recharged to 100% state of charge.
3. Batteries removed from service for storage should be charged to 100% state of charge. Every 6 months, batteries must be recharged to 100% state of charge.
4. Do not store batteries attached to radios or host devices. This will minimize current drain on the battery.

Note: Batteries removed from storage may take several charge / discharge cycles to achieve their optimal capacity. One or two reconditioning cycles will accelerate capacity recovery.

## **ACTIVE CIRCUITRY BATTERIES WITHOUT SLEEP MODE**

The batteries listed below have a higher self discharge rate due to additional active circuitry required to meet specific regulatory requirements. For best performance these batteries should be charged and put into use within one (1) month of receipt. However, if storage is required, the batteries should be charged to a 100% charge state every 6 months.

## **ACTIVE CIRCUITRY BATTERY KIT NUMBERS**

NNTN8570A	IMPRES Li-Ion 1250 mAh IECEX/ATEX
NNTN8840	IMPRES Li-Ion 2000 mAh IECEX/ATEX/M1
NNTN8750A	IMPRES Li-Ion 2050 mAh CSA
NNTN8287	IMPRES Li-Ion 2300 mAh CSA
NNTN8386A	IMPRES Li-Ion 1800 mAh CSA
NNTN8359A	IMPRES Li-ion 2075 mAh IECEX/ATEX
NNTN5510	Li-Ion 1420 mAh IECEX/ATEX
NNTN7383	Li-Ion 750 mAh IECEX/ATEX

## **ACTIVE CIRCUITRY BATTERY STORAGE RECOMMENDATIONS**

1. New batteries that will be stored should be charged to 100% state of charge within 1 month of receipt. Every 6 months, batteries must be recharged to 100% state of charge.
2. Batteries removed from service for storage should be charged to 100% state of charge. Every 6 months, batteries must be recharged to 100% state of charge.
3. Do not store batteries attached to radios or host devices. This will minimize current drain on the battery.

Note: Batteries removed from storage may take several charge / discharge cycles to achieve their optimal capacity. One or two reconditioning cycles will accelerate capacity recovery.

