

# INSTRUCTIONS FOR CHARGING AND STORAGE OF MICROPAQ™ BATTERY



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*Before installing a battery, carefully inspect the battery case. If there are any signs of damage, cracks, or leaks, discard the battery properly and do not use it.*

## To Recharge a Battery:

1. On the Micropaq battery charger, choose an empty battery well where the LED is off.
2. Insert the depleted battery into the battery well.
3. Confirm that the charger displays a flashing green LED by the battery to indicate the battery is detected or is charging.
4. When the green LED is on continuously, the battery is fully charged. Remove the battery.

## Facts:

- The Micropaq battery is a rechargeable Lithium Ion battery.
- The battery is water resistant. Do not submerge in water.
- The charger can accommodate up to eight batteries. The charger charges a maximum of four batteries at a time. As batteries are charged, the charger unit will automatically move to depleted batteries and begin charging.
- After a battery begins recharging (as indicated by the green LED that flashes every second) it is typically fully recharged within four hours at room temperature. After a battery is fully charged, the charger continues to maintain the full charge on the battery until the battery is removed.
- Leaving a fully-charged battery in the charger will not harm the battery.
- When batteries are removed from the charger they will hold their charge for several months.
- Remove batteries from the battery charger if the battery charger will be disconnected from AC power for more than a few days.
- Operating times on a fully charged battery with minimal alarms per hour and minimal motion artifact is approximately 25 hours if monitoring ECG only and (if applicable) 6 hours if monitoring ECG and continuous SpO<sub>2</sub>.

## Troubleshooting the Battery Charger:

| Battery Charger LED (light)    | Battery Status and Possible Responses   |
|--------------------------------|---|
| LED off                        | No battery is detected  |
| Green LED flashing very slowly | Battery is detected and waiting to be charged   |
| Green LED flashing             | Battery is charging   |
| Green LED on continuously      | Battery is fully charged  |
| Yellow LED on continuously     | Something is wrong with the battery or the charger<br>- To check the battery, try recharging it in a different battery well. If the result is the same, discard the battery using appropriate recycling.<br>- To check the charger, insert a different battery into the battery well. If the result is the same, the charger may need repair. Contact biomedical engineering. |

## Acuity® Alerts and Alarms:

The Acuity unit is configured to allow you a short time (typically 30 seconds or more) to change the Micropaq battery while the Micropaq is connected to the network without causing an Acuity equipment alert. If the Micropaq is connected to the network and the battery is removed for longer than the allowable battery changing time, Acuity generates a DROPOUT equipment alert at the Acuity Central Station. If the patient is out of range and the battery is removed for a longer period of time than the allowable battery changing time, when the Micropaq reconnects to the network both Acuity and Micropaq will display a message asking you to confirm the patient connected to Micropaq. You can confirm the patient at either Acuity or Micropaq.

## Maximizing Battery Life:

**Being out of range (or not connected to Acuity)** - Review with the patient the range of coverage the monitor has so they can be informed of their traveling distance. Ask the patient to return into monitoring range when the Micropaq gives an audible alert. They will have to ask a staff member to acknowledge the alert.

**Frequency and duration of alarms and alerts** - At Acuity review your patient's current alarm settings and make the necessary changes to optimize monitoring while minimizing frequent audible alarms.

**Activating the keys on the Micropaq** - Ensuring proper installed configuration choices that best meet the patient's monitoring needs can minimize the amount of operator use of the Micropaq keys. Contact Technical Support for suggestions and implementation.

**Age of battery** - The life of each Micropaq battery is approximately 100 charge/discharge cycles. Each Micropaq comes with two batteries. Purchase additional batteries routinely to prevent any disruption in the monitoring of patients.

**Amount of motion artifact during SpO<sub>2</sub> monitoring** - To minimize motion artifact simply "spot check" your patient's SpO<sub>2</sub>. Insert the SpO<sub>2</sub> cable into the top of the Micropaq and put the sensor on the patient's finger. After a reading has been established, remove the SpO<sub>2</sub> cable from the patient and the Micropaq and acknowledge the equipment alert. Properly store unused cable.

## Recycling:

When the Micropaq battery, Micropaq monitor, or Micropaq battery charger reaches the end of its life, recycle it locally according to national, state, and local regulations. You can also return the battery, monitor, or charger to Welch Allyn Protocol for recycling.

**For Technical Support or to order additional batteries call 800-289-2501.**

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