

Lithium-ion, Ni-MH and Alkaline Battery

STANDARD OPERATING PROCEDURE

The proper and safe handling of Alkaline (non-rechargeable) and Lithium-ion, Ni-MH “secondary” or rechargeable batteries.

1) Do not leave any batteries where the temperature may become high

Do not leave any batteries on the dashboard of a vehicle, on a window sill, or any location where they are exposed to direct sunlight, or high temperatures, such as in a vehicle parked in the sun. Doing so may cause the battery to leak.

2) Do not leave batteries near a heat source

Do not leave any batteries near a heat source, such as a heater. Doing so may result in overheating, explosion or fire.

3) Reading the instruction manual

Be sure to read the instruction manual of the device and follow any warnings before using any battery.

4) Remove batteries from a device that is not being used for an extended period

When a device is not being used for an extended period (over 30days), remove all batteries and store them in a safe dry place. DO NOT leave batteries in a device in storage and/or with the device powered on

5) Do not get batteries wet

Do not spill water, salt water, juice or other fluids on any battery. Doing so may break the protection circuit built into the battery, resulting in the battery being charged with an abnormal current or voltage, and cause overheating, explosion or fire.

6) Be sure to recharge the battery with the specified battery charger and AC adapter

Use the battery charger and AC adapter specified for use with the lithium-ion secondary battery. Other battery chargers or AC adapters may have different charging specifications that can result in overheating, explosion or fire. DOES NOT APPLY TO ALKALINE BATTERIES - THESE ARE NOT RE-CHARGEABLE

7) Properly connect the battery in the charger or other device

A lithium-ion secondary battery comes with a specified orientation of positive and negative terminals. Do not force the battery into a battery charger or device if it does not fit. Connecting the battery with the positive and negative terminals reversed will instead cause it to charge incorrectly, and may result in abnormal chemical reactions internally that lead to leakage, overheating, explosion or fire. DOES NOT APPLY TO ALKALINE BATTERIES - THESE ARE NOT RE-CHARGEABLE

8) Do not directly connect a lithium-ion secondary battery to an electric power outlet or 12V aux socket.

Do not directly connect a lithium-ion secondary battery to an electric power outlet or 12V aux socket of an automobile without the use of a battery charger. Doing so may result in electric shock or the application of high voltage that produces an excessively large electric current, causing the lithium-ion battery to generate heat, explode or catch fire.

9) Do not recharge batteries where the temperature may become high

Do not recharge lithium ion secondary batteries on the dashboard of a vehicle, on a window sill, or any location where they are exposed to direct sunlight, or exposed to high temperatures, such as in a vehicle parked in the sun. High temperatures may activate the built-in protection mechanism designed to avoid accidents, preventing the battery from being charged, or the protection circuit may break, resulting in the application of abnormal current or voltage when charging, and leading to overheating, explosion or fire. Always charge in well ventilated area.

10) Do not throw a battery into a fire

Do not throw any batteries into a fire or heat them on a hot plate or by other means. Doing so will only melt the insulator, damaging the gas exhaust valve and the protection mechanism, but also lead to overheating, explosion or fire.

11) Do not short-circuit the battery

Do not connect the positive and negative terminals of any battery with a metal object. Do not carry or store any battery with metal objects such as necklaces, hair pins, coins or keys. Metal objects may short-circuit the positive and negative terminals of the battery, resulting in a large electrical current, which may result in overheating, explosion or fire, or overheating of the metal object.

12) Do not apply strong impacts to the battery

Do not throw any batteries, drop them from high places, or otherwise subject them to strong impacts. Doing so may deform the battery and break the protection circuit built into the battery. This may result in the battery being charged with an abnormal electric current or voltage, and cause overheating, explosion or fire.

13) Do not drive a nail into the battery or crush it underfoot

Do not drive a nail into any battery, hit it with a hammer, or crush it under foot. This may deform the battery and break the built-in protection mechanism, resulting in overheating, explosion or fire.

14) Do not directly solder batteries

Do not apply solder directly to the terminals of any battery. The heat will melt the insulator, damaging the gas exhaust valve and the protection mechanism, which could lead to overheating, explosion or fire.

15) Do not put a battery in a microwave oven, pressure container, or other such devices

Do not put any battery in a microwave oven, pressure container, or other such devices. Sudden heating may break the seal, resulting in overheating, explosion or fire.

16) Do not recharge batteries where heat can build up

Do not place combustible materials on top of or over any battery when recharging or discharging. Doing so may result in overheating, explosion or fire.

17) Do not disassemble or modify batteries

Do not disassemble or modify any battery. Lithium-ion secondary batteries have a gas exhaust vent and a built-in protection mechanism to prevent accidents. Damaging them may cause the battery to overheat, explode or fire.

18) Keep batteries out of the reach of children

Keep ALL batteries out of the reach of children. Careless handling often involves risk.

19) Keep batteries out of reach of children and animals

Keep devices that contain batteries and ALL batteries out of the reach of children and animals to prevent the batteries from being licked, swallowed, chewed, etc.

20) Do not use batteries that work for an extremely short period of time

Lithium-ion secondary batteries have finite life spans. If the device requires frequent charging, replace the battery with new one.

21) If something unusual is noticed, stop using the battery

If any battery gives off an odour, overheats, is discoloured, deforms, or reacts in anyway unusual during use, recharging or storage, remove it from the device or battery charger and do not use it again. Continuing to use such batteries may result in overheating, explosion or fire.

22) If a battery leaks, keep it away from fire

If a battery leaks or gives off an unusual odour, immediately remove it and place it away from any naked flame. The leaking electrolyte is flammable and can cause the battery to explode or catch fire.

23) Beware of fake and modified batteries

Batteries that have no manufacturer or distributor names or warning labels displayed, may be fake or modified. Fake and modified batteries may have damaged or missing safety mechanisms that are designed to prevent accidents.

24) Do not place batteries on top of an electromagnetic range

Do not place batteries on top of or near the electromagnetic range. The batteries may become hot, causing them to overheat, explode or catch fire.

25) Do not force decayed batteries into a device

Do not force decayed batteries into a device. Doing so may deform the batteries and break the internal parts or built-in protection mechanisms. Continuing to use such batteries may result in overheating, explosion or fire.