

BATTERY SHELF LIFE AND RECHARGE GUIDELINE

Emergency fixtures use maintenance free batteries. When a fixture is on the shelf (stored) before installation, all battery types need regular discharge and recharge to avoid battery deterioration. Deterioration can result in permanent capacity loss or complete Battery failure, emergency fixture manufacturer can not provide quality warranty for battery if do not operate proper maintenance before installation.

The recharge period is always taken from the Manufacture Date written on the battery surface

Lead-Acid battery:

Shelf life = Recharge Required = 3 months.

Recharge should involve full discharge and recharge to at least 50% rated capacity

Ni-Cad and Ni-MH battery:

Shelf life = Recharge Required = 9 months.

Recharge should involve full discharge and recharge to at least 50% rated capacity

LiFePO4 battery:

Shelf life = Battery Charge Required = 12 months

Battery should recharge to at least 50% rated capacity

Battery discharge and recharge can be operate by emergency fixture itself, also can operate by other professional discharge and recharge equipment, below instruction for reference.

| Battery type | Operate by EM fixture | Operate by other equipment |
|---|--|---|
| Lead-Acid battery (Rated 6V battery) | Discharge then Charging battery around 12 hours | Discharge 100% rated capacity, Charge current 0.3A max, constant voltage 7.2-7.35V*12 hours |
| Ni-Cad and Ni-MH battery | Discharge then Charging battery around 12 hours | Discharge current 0.2CA to 1V per cell cut off. Charge current 0.1C*12 hours. |
| LiFePO4 battery | Charging battery around 12 hours | Charge current 0.2CA Limit battery voltage 3.365V per cell |

BATTERY SHIPPING

We advise that, when shipping batteries (of any type) over long distances, where the battery may be subjected to high temperatures for long periods, it is best practice to not charge the battery above 60% capacity.

This practice helps to minimise permanent damage to the battery.

BATTERY SAFETY INFORMATION

Proposed long term storage temperature in 15 °C ~25°C, humidity in 45-85% for all type battery.

Lead-Acid battery Handling and storage

Store batteries in cool, dry, well-ventilated areas with impervious surfaces and adequate containment in the event of spills.

Batteries should also be stored under roof for protection against adverse weather conditions. Separate from incompatible materials, Store and handle only in areas with adequate water supply and spill control. Avoid damage to containers. Keep away from fire, sparks, and heat.

Ni-cad battery/ Ni-MH battery /LiFePO4 battery

Do not damage or remove the external tube.

Never throw out cells in a fire or expose to high temperature.

Do not soak cells in water and seawater.

Do not expose to strong oxidizers.

Do not give a strong mechanical shock or throw down.

Never disassemble modify or deform.

Do not connect the positive terminal to the negative terminal with electrically conductive material.

Do not short or install with incorrect polarity.

Avoid direct sunlight high temperature, high humidity and the places where it is exposed to the static electricity.