INSTALLATION INSTRUCTION
SELF-DIAGNOSTICS / SELF-TEST OPTION

SAVE THESE INSTRUCTIONS

1. When AC power is supplied to fixture, the unit will automatically initiate a self-test and self-diagnostic test as follows:

   (1) Verifies battery disconnection, charger board failure at every 5 seconds.

   (2) 1 minute self-testing every month.

   (3) 30 minutes self-testing on every 6 months after installation.

   (4) 90 minutes self-testing on every 12 months after installation.

2. Dual color LED lamp indicator shows the following status:

   (1) Green color On / Ready
   blinking: Testing

   (2) Red color (Service Alert)

   (3) Service Alert LED Code (Red color LED lamp indicator)

●	One blink, 4 second pause	Battery is not connected
● ●	Two blinks, 4 second pause	Battery voltage too low
● ● ●	Three blinks, 4 second pause	Charger board circuit failure
● ● ● ●	Four blinks, 4 second pause	Transfer function failure
● ● ● ● ● ● ●	Seven blinks, 4 second pause	LED strip failure

NOTICE

After solving the fault of emergency equipment, please press test button for 2 seconds without releasing to reset. LED indicator will show green.

3. Self-testing / self-diagnostic also have manual test function, press test button as follows:

Press test button once	30 seconds discharge test
Press test button twice within 2 seconds	3 minutes discharge test
Press test button 3 times within 2 seconds	30 minutes discharge test
Press test button 4 times within 2 seconds	90 minutes discharge test

BATTERY STOCK 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

Emergency fixture in stock

When a fixture is on the shelf (stored) before installation, battery must not connect to PCBA to avoid self-discharge, battery must keep disconnect status before installation.

If battery connect to PCBA without charge battery for over 10 days, battery will be deteriorate because of battery self-discharge properties, and cannot recover to original capacity.

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 ℃ ~25℃, humidity in 45-85% for all type battery.

Lead-Acid battery Handing 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.