



## ENTERTAINMENT ELECTRICAL SAFETY ASSOCIATION

### **Entertainment Industry Guideline for Usage of batteries and battery chargers**

With the large influx of batteries being utilised in the entertainment industry, including camera and lighting power as well as communication systems such as wireless microphones and walkie talkies, these basic guidelines will assist in keeping your battery-supplied DC power sources reliable and safe in both the charging and utilisation stages. There have been several instances of damaged systems due to incorrect charging of the batteries. (See attached pictures below).

- ***The charging system must bear an electrical approval mark that is recognized by the local AHJ, as required for any piece of electrical equipment,***
- Consult the manufacturer's operational manual before using the battery system.
- Charge only batteries specified by the manufacturer, for usage with the specific battery charger or charging system.
- **Adhere to any manufacturer's limitations on charge times for each battery and charger.**
  
- ***The charging area must be dry and have a non-flammable surface.***
- There should be no flammable materials in close proximity to the batteries and chargers.
- Ensure that the area is adequately ventilated and,
- Ensure that there is sufficient room for appropriate spacing between batteries while being charged.
- If cabinets are used, any electrical entry/installation must be done to electrical standards, and bear an electrical approval marking, and must be ventilated to limit internal temperature rise, incorporating louvres designed to provide convection air flow or incorporate cooling fans, or both.
  
- ***Appropriate and safe power distribution for the chargers:***
  - Power to multiple chargers must be from approved multiple outlet devices, such as linear multi-outlet strips
  - Battery chargers must not be plugged into multiple (daisy-chained) extension cords
  - Power bars shall not be plugged into another power bar (daisy-chained)



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### Recognized Certification Markings



### Recognized Field Evaluation Agency Markings



Example of batteries overheated during charging

