

# Alternative methods to recharge batteries for radio and satellite phone systems.

During an emergency, communications between response agencies is critical to build situational awareness, request or help and direct or coordinate action. But how do you keep your communications equipment batteries charged up and ready. Consider alternate means of charging your batteries during a long-term power outage, including an EMP event.

- A. Protect your battery charger from Thunderstorms.
  - 1. If you know a thunderstorm is approaching unplug your battery charger
  - 2. Use a good quality surge protector
  - 3. Use an uninterruptible power supply (UPS)
  
- B. Protect your battery charger from Solar EMP.
  - 1. Everything for Thunderstorms and;
  - 2. Sign up for Space Weather Prediction Center (SWPC) alerts
  
- C. Protect your digital battery charger from Nuclear EMP
  - 1. Everything for Thunderstorms and;
  - 2. Keep at least one, if not several of your digital battery chargers in EMP bags or wrap in heavy duty aluminum foil.
  
- D. Means of generating electricity for charging your batteries.
  - 1. Standby facility generator (diesel or propane)
  - 2. Portable generator (gasoline, diesel or propane)
  - 3. Solar panels and charger controller hooked up to an appropriate battery. You may also need an inverter to change power from 12 volts to 110 volts.
  - 4. Small windmill or micro-hydro power systems for charging 12-volt batteries. You may also need an inverter to change power from 12 volts to 110 volts.
  - 5. Wood Stove Thermoelectric Generator for charging 12-volt batteries. You may also need an inverter to change power from 12 volts to 110 volts. <https://www.tegmart.com/wood-stove-thermoelectric-generators/>
  - 6. Human powered generator using a bicycle or hand crank. (Recommend the bicycle!)