

ERC-East Portable Generators & Antenna Safety

25 Aug 12 / Version 1.0.2

Portable Generator Safety:

1. Portable generators are designed to be connected only to selected appliances or lamps. These generators never should be connected directly to a building's wiring system without a professionally installed, UL Listed transfer switch.
2. Handle fuel carefully. Turn the generator off to refuel. Gasoline and its vapors may ignite if they come in contact with hot components or an electrical spark. Store fuel in a properly designed container in a secure vented location. Gasoline, kerosene and other flammable liquids must be stored outside of living areas in properly labeled, non-glass safety containers. Flammable liquids should never be stored in a garage if a fuel-burning appliance is in the garage. The vapor from gasoline can travel invisibly along the ground and be ignited by pilot lights or arcs caused by activating electric switches.
3. Before starting any generator, carefully read and follow all of the engine and generator's manufacturers instructions. If you have any questions concerning the safe operation of the generator, call the dealer **before** operating the unit. Follow the manufacturer's instructions to **properly ground** the generator.
4. Review owners manual for wattage limits and abide by them. Overloading the generator can be a hazard. Consider emergency circuits only. Be sure the total electric load on your generator won't exceed the manufacturer's rating including starting requirements for items with motors. Motor-driven appliances, such as refrigerators, freezers, air conditioners and furnace blowers require up to three times their normal wattage to start or to periodically cycle a compressor. Choose a generator that meets or exceeds your "constant wattage" needs and that also has a surge rating that meets or exceeds your "start-up wattage" needs.
5. Prioritize your needs. Use the lowest wattage light bulbs that provide a safe level of light, reserving power for additional lighting elsewhere or a small appliance. Remember that the greater the load on your generator, the more fuel it will use.
6. Keep cords out of the way so they don't present a tripping hazard -- especially in dimly lit doorways or halls. Never run cords under rugs or carpets where heat might build up or damage to a cord may go unnoticed.
7. Use only UL-listed, three-prong extension cords. Be sure the extension cord is the proper size (wire-gauge) to handle the electric load that will be plugged into it. Overloading an extension cord may lead it to overheat and pose a fire danger
8. Maintain adequate ventilation. To avoid carbon monoxide (CO) poisoning never use a generator indoors or in an attached garage. Use it only in a well-ventilated, dry area, away

from air intakes to the home, and protected from direct exposure to rain and snow, preferably under a canopy, open shed, or carport. Generator exhaust is deadly to both humans and animals.

9. Water conducts electricity. Avoid dangerous electric shocks. Follow the manufacturer's instructions to **properly ground** the generator. Make sure that your hands are dry and you're standing in a dry place whenever you operate the generator.
10. Protect your generator. Turn off or disconnect all appliances and lights before you begin operating the portable generator. Once the generator is running, turn your appliances and lights on one at a time to avoid overloading the unit.

Antenna Safety:

1. Completely read the manufacturer's directions in full before proceeding.
2. Installation or dismantling any antenna near power lines is dangerous. Each year hundreds of people are killed or injured while attempting to install or dismantle an antenna. For your safety and proper antenna installation, read and follow all safety precautions.
3. Choose an installation site for safety as well as performance.
4. All electric power lines, cable lines and telephone lines look alike. To be safe, assume **any overhead line** can kill you.
5. Do not place an antenna where it could potentially fall on to, or blow into a power line. To determine the **safe distance** follow these steps:
 - Determine the proposed height of the antenna.
 - Add the antenna length and the length of the tower mast.
 - Then at a minimum, double the figure.
 - That figure is the minimum safe distance from the nearest power line that you should install an antenna.
6. Never use a utility pole as a support for an antenna or guy wire. Never climb a utility pole.
7. Outdoor antennas must be grounded with an approved lightning arresting device. Local codes may apply. The radio should also be grounded to an earth ground to help protect both the radio and its user. Do not use hot water pipes or gas lines as a ground source.
8. Take the time to plan your installation procedure. Each person should have assigned tasks. A foreman or "boss" should be chosen to call out instructions and watch for signs of trouble.
9. Dress properly with rubber soled shoes, rubber gloves, and long sleeve shirt. Use an approved safety belt.

10. Do **not** work on a wet, snowy or windy day or if a thunderstorm is approaching.
11. Do **not** use a metal ladder.
12. If the assembly starts to drop . . . get away from it and let it fall. Remember that the antenna mast, cable, and guy wires are all excellent conductors of electrical current.
13. If any part of the antenna should come in contact with a power line . . . **don't touch it or try to remove it yourself**. Call your local power company immediately. They will remove it.
14. Should an electrical accident occur . . . **don't touch the person in contact with the power line**, or you too can become electrocuted. Instead, use a **dry** board, stick, or rope to push or pull the victim away from the power lines and antenna. Once clear, check the victim. If he has stopped breathing, immediately administer cardiopulmonary resuscitation (CPR) and stay with it. Have someone else call for medical help.
15. Remember that guyed towers are **not** self-supporting at any height. If your antenna installation includes towering, read the additional advisory on towers.
16. Install wire antennas high enough that they will not be "walked into" by people.
17. Do not install wire antennas over or under utility lines.