

Electricity & Generators

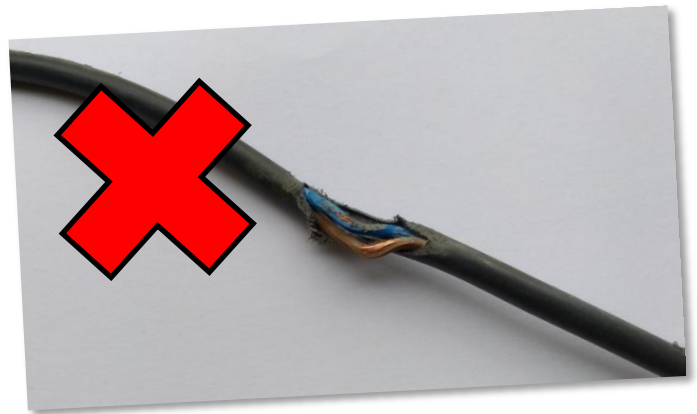
Electricity can cause death or serious injury if the installation is faulty or not properly managed. All contractors are responsible for ensuring that their electrical systems are safe however **Event Managers must check for compliance with procedures** below and raise any areas of concern with the contractor immediately.

Some event sites will request that an electrician checks and signs off all installations on site.

Electrical Equipment

Before using any electrical equipment, make sure that:

- The equipment is in good working order. Is it new? Is it in date for its PAT test?
- None of the cables are damaged or frayed
- The equipment is suitable to be used in the space you're in. For example, it's safe to use outside
- The power draw of each piece is known. A kettle draws much more than an LED light or laptop charger.



Cables

Make sure you stick to the following for you and any suppliers on site:

- Keep cables tidy, out of walkways and out of the way of the public
- Avoid having cables crossing any public walkways and course routes
- Cover any cables with suitable foot/vehicle protection if they have to cross walkways
- Unwind any extension leads on drums or reels. Leaving them coiled generates heat and can cause them to melt or set on fire.
- Don't overload sockets
- Don't daisy chain extension leads. Plugging on extension into another. And another



Indoor or Outdoor?

Cables for outdoor events should be outdoor rated and have suitable weather protection. In wet surroundings unsuitable equipment can easily become live and can make its surroundings live meaning that there is a high risk of electric shock. The cables and plugs pictured to the right are **INDOOR** rated and should not be used externally



Cables to the left are **OUTDOOR** rated and can be used outdoor safely. Electrical equipment will come with an IP rating, this stands for ingress protection. Anything that is rated **IP44** or higher should be sufficient for outdoor use.

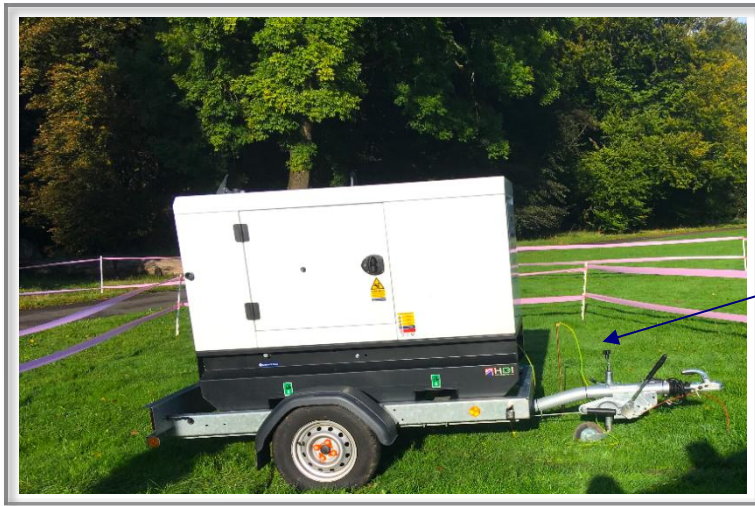
Generators

Generators should not be accessible to the general public and must be cordoned off to prevent access. Ensure that the cordon is wide enough to ensure that a child could not put their arm through it and reach to the generator.



Generators will require fuel; it is important that the fuel is appropriately managed throughout the event and that re-fuelling of generators is only undertaken by a competent person. Fuel should be stored securely, out of sight of the public and away from direct sunlight or heat sources. It should not be stored immediately next to the generator.

Earth Spikes



Earth Spike

Generator with earth spike

Generators over 10kW should **usually** have an earth spike – generally a copper rod inserted into the ground. If there is a fault with the generator this conducts the electrical current to the ground rather than making the system live leading to potential electric shocks.

Generators under 10kW will **usually not require** an earth spike – you can usually identify the type of generator from the outer casing



3.5kW generator – earth spike not generally required. You should be able to identify the wattage of the generator from the display panel on the side of the generator

Generators need to be adequately ventilated, so exhaust fumes do not build up. Generally, when they are outdoors this should be easy but watch out for generators in the back of vans and ensure that they are ventilating into fresh air and there is adequate space to prevent them from overheating.

Actions

- Give all electrical installations a pre-event check and ensure there is no overloading, coiled cables or daisy chaining.
- Make sure you know what electrical equipment and generators are coming on site and check that they are appropriately managed and cordoned off on the day
- Ensure that supplier/sponsor equipment does not have domestic plugs exposed as these are not rated for outdoor use and could easily create a fire or electrical shock risk.
- Check with the venue whether you will require electrical sign off for the event.