

FUNDAMENTALS OF LIGHTING

POWER

1. Use a multi-plug temporary power tap (strip) with six outlets and a mini-circuit breaker: at least one for a 6' tree and two for an 8' tree.
2. Place the strip on the tree trunk so it is hidden in the tree but near the bottom of the tree so it can easily be plugged into a wall outlet.



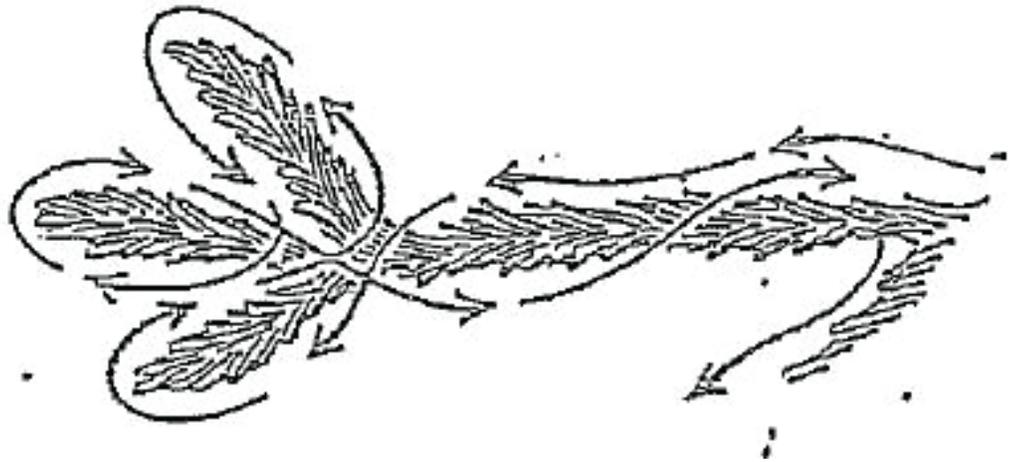
PLUGGING LIGHTS TOGETHER

1. Whether you are using incandescent lights or LED lights, please check the box the lights come in to determine how many sets of lights or how much voltage can be safely connected together.
2. Never connect cords of incandescent and LED lights together.
3. Only use lights and decorations in accordance with manufacturers' instructions. Be sure to check the bulb type and wattage before connecting lights together.
4. Plug in the lights as you put them on the tree so you know they will work. This saves time taking problem lights off the tree.
5. Miniature light sets and bulbs are not necessarily interchangeable so it is best to use lights from a single manufacturer.
6. Burned out bulbs should be replaced with a bulb for the same light set. For example, do not use a 50 light set bulb in a 35 light set. The bulbs are different volts.

FUNDAMENTALS OF LIGHTING

PUTTING LIGHTS ON A CHRISTMAS TREE

1. Begin putting lights on the tree from the base of the tree and work up to the top.
2. Put the lights on by section – bottom, middle, and top. Do not string lights from section to section. This will make it difficult to take apart for storage.
3. Begin wrapping the branches from the trunk out to the ends of each branch then back to the trunk.
4. For maximum effect, be sure to wrap each branch.
5. Do not let lights hang from the branch loosely.



WHAT TO DO WHEN CHRISTMAS LIGHTS FAIL

1. Make sure all circuits are on and all plugs are plugged into a sufficient power source.
2. Check the plug fuses in the light set. A common problem is that circuit contact is not being made. You may need to spread the prongs to ensure they may contact when plugged in.
3. While leaving the light set plugged in slowly run your hand over the bulbs. If the lights come on because you have wiggled a bulb, replace that bulb. Make sure you unplug the light set when replacing the bulb to avoid a surge that may burn out the new bulb. A common problem is that the wire on the bulb is not making contact in the light socket. Burned out bulbs may cause the remaining bulbs to burn brighter. Make sure you unplug the light set when replacing the bulb to avoid a surge that may burn out the new bulb.
4. Make sure that only the appropriate light sets and the number of light sets are plugged together. Only 35 light sets plugged to 35 light sets, etc. and a maximum of three plugged together (end to end light sets). Some new lights allow more than three plugged together. Follow the manufacturer's guidelines.