

Safety emphasis is on avoidance of risk,  
not the skills for working on live  
equipment.

The Dangers of High Voltages

The risk of Electrocutation

Risk of RF Induction Heating on Metal  
Rings, Watches

Potential of RF Burns

Hearing Damage from excessive  
Headphone Use

# ELECTRICAL WIRING

- Items ought to be earthed, and Radio Shacks ought to be protected by RCD 'Earth Trips'
- Only items which have 'Double Insulation' need not be earthed
- Have a single well marked 'OFF' switch for all power.
- If you are a rescuer, do not touch a casualty unless you are sure power is off, else you will become a casualty yourself.

- Ensure shack equipment is run from a common mains earth to prevent earth loops
  - use filtered mains boards and ferrite rings correctly.
- Modern plastic Gas & Water Pipes give high resistance earths
- Beware of some House earths floating above earth potential
- Do not mix:-
  - Mains Earth (for safety) with...**
  - RF Earths (for Antennas)**
- In any case mains earths are electrically noisy

Flex Colours:- Live=**Brown**, Neutral=**Blue**,  
Earth=**Green/Yellow**

Avoid whiskers, trapped wires, and ensure that Cord Grips are secure, but don't pierce the insulation.

Fuses are to protect the equipment. Low power devices must be correctly fused at 3A or 5A - not always 13Amps

Faults aren't always shorts. A fault may not blow a large fuse, but may overheat a flex and cause overheating/fires

Be alert for fraying or damaged insulation on mains leads

# INDOORS

- Shack Tidiness: Avoid trailing mains leads on the shack floor
  - Trip Hazards!
- Headphones: Be aware that excessive use to pick out weak signals from background noise can damage hearing
- Allow time for Power Supplies to fully discharge after switching off
- Lightning - Disconnect your Antennas!
  - protect your radios from static charge

# OUTDOORS

Ladders - Take care when erecting antennas etc

Lightning - High antennas may need special protection

Antenna elements should not be touched when transmitting and should be mounted to avoid accidental contact

Keep clear of Overhead Power lines, and snagging or coupling in to telephone lines

Feeders/antennas must be soundly fixed in case of being accidentally being pulled, high winds, icing, bird strikes