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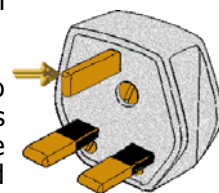


!! IMPORTANT HEALTH & SAFETY INFORMATION !!

Electricity can be dangerous, but unless you're growing outdoors in soil you'll have to use it. Make sure that you buy your ballast, light (in fact all your equipment!) from a trustworthy vendor. Finding this leaflet in a shop is not an endorsement of that shop by either UK420 or LCA; we would hope that the reputable retailers will understand our reasons for stating this, there are a lot of cowboys out there that are in it only for the money.

Always ensure that all fuses are of CORRECT rating: allow a 13 amp fuse for a light and a 3 amp for a small pump/fan. As a general rule, allow 1 amp/200 watts, except for lights which pull a lot of current on striking (2-3 times greater than the operating current).

If you have a multi-meter you should also ensure that all appliances are earthed to their metal casings. Set the meter for continuity (so it beeps when the probes touch). Get the plug which you intend to place into the power socket and put one probe on the earth pin of the plug (labelled here with an arrow to the right) and keep it there. Put the other probe on any bare metal or screws that go through painted metal on the light and ballast. If you hear a beeping when your probe touches the bare metal, that's a good thing. If you don't hear it, don't buy!



To avoid accidents label all plugs and un-plug equipment before moving or working on it. All wiring should be securely held to avoid accidental wire or insulator damage; ideally locate your wiring in trunking/conduit, but cable-tie securely off the floor.

Water can be a real problem if you are growing in a home-made hydro system. There are step-by-step guides to making your own hydro systems on the forums at UK420. Some basic advice though: make as few holes as possible. If growing into containers, make any holes higher than the maximum water level. Consider installing a waterproof barrier in the bottom of your growroom as another barrier against leaks. But if you're buying a hydro system from a reputable dealer, or growing in soil, then there isn't as much need to worry.

Electricity and Water are never a good mix. If growing in soil or hydro you should make sure that whenever possible the electric components are higher up than the area that water could spill out into and that they are secured wherever they are (not necessarily bolted down, but certainly not able to go anywhere). AVOID **electric shocks**—they can be **fatal!**

Another concern for hydro growers is the air and/or water pumps being used. Don't leave pumps on the floor: one leak and not only does it become potentially very dangerous, but you could be forking out a fortune for new pumps. Air pumps should always have a one way/check valve installed in the pipe, this stops water from running back into the pump when it's not in operation.

Electricity can be fatally **dangerous** and if you're not sure what you are doing there's one simple rule, **don't touch it**. Get in contact with someone who knows: if you have the internet, the people at UK420 will be able to point you in the right direction.

Grow Lights, especially higher-wattage units, are very bright indeed and should not be directly looked at unless you own a welding mask or similar. They might not look it when they first strike, but they warm up quickly. Sunglasses are recommended for viewing during the light period.

Bulbs can get very hot and the glass should never be touched by your fingers at any time. Contaminating the glass may create hot spots causing the glass to crack. Use welding or oven gloves when handling (especially removing) the (hot) bulbs, and screw in the new bulb straight out of its cardboard tube packing.





The makers, contributors and distributors of this leaflet (including UK420 and the Legalise Cannabis Alliance) do not encourage cannabis cultivation, cannabis possession or cannabis trafficking in any country where cannabis is illegal. Unfortunately the law is still outdated and cultivation without a license is a crime. The information contained is intended for educational purposes only.



!! IMPORTANT HEALTH & SAFETY INFORMATION !!

Some of the **chemicals** in the nutrients and pH buffer solutions available are very dangerous, toxic and/or caustic, and are a source of discussion within the growing community. Some people say that their use in itself puts undesirable chemicals into the finished product. They change the pH with citric (lemons) or acetic (vinegar) acid and use all natural nutrients and all natural soil.

When **measuring** out the chemicals be careful: make sure you have read the warning label on the bottle and followed it to the letter. Syringes are useful for measuring without pouring: they should be clearly labelled and used for one additive only.

Try to keep your equipment clean and rinsed off. Salts can be deposited as the solution dries out and that could impair your readings: mixing random chemicals can produce bad results. Ensure that any spills are quickly cleaned up. A simple tip for avoiding spillage is to replace the lids/caps *immediately* after use, also preventing contaminants in the air from polluting the solution.

Crop Spraying is something you should think carefully about: accounts of people who have sampled a bad crop that had an unpleasant adverse effect on them are plastered all over the media. It is perhaps the addition of various unhealthy pest sprays and fungicides which are, amongst other things, to blame.

Many chemical solutions are available for spraying onto your plants to get rid of the various pests and fungi that can appear. Some of these pesticides you wouldn't want to eat, let alone smoke! Beware of growshops who may try to sell you their most expensive stuff. All-natural methods can be used - either natural predators introduced or all-natural ingredient solutions. One method is to mix 1 ltr of warm water, 8 ml cold-pressed Neem oil (can be bought from pharmacies to treat lice), 5 ml liquid soap (plain unscented). Shake well to form a milky-white liquid, with no oil floating on top. If after the solution settles there is still oil at the top, add a little more soap drop by drop and keep shaking until the oil is gone.

Spray especially under the leaves where critters hang around and if your not budding don't be afraid to splash it about and get those plants dripping wet (in full flower getting your buds wet could cause bud rot). Repeat every 3 days for 2 weeks, 3 weeks to be sure, spray when your lights have just been put out to prevent burning. If they still wont die you can add Pyrethrum to the above mix, another natural ingredient which will dissolve safely by harvest time. Remember that whatever you spray that you might end up smoking it!

General Growroom Cleanliness. It's always a good idea to keep any **pets** that you might have out of your growroom: not only is there a chance of getting animal hair all over your grow, but there's no telling what they might traipse in after running through a field or from outside the house.

For the same reason it's a good idea to wash your own hands before touching your plants and take your shoes off if you're using a whole room. Take special care if you have been to another' growroom—male pollen and pests can easily come with you - or if you have been doing any other gardening.

Security, simply the biggest issue. If you are growing and you don't want a *major disruption* tell no-one. This is the **ONLY** chance you have of avoiding *major disruption*. It can be hard when you're so proud of all the work you've done and of the high quality you have produced.

At www.uk420.com you can anonymously join the forums, show off your stuff to thousands of like-minded growers and, if your good enough, win a prize in the monthly Cream Of The Crop competition!

