Subject: Electrical Outlets
Posted by _SSnipe_ on Mon, 13 Dec 2010 06:08:12 GMT
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Anyone here a electrician? I have a few questions about outlets and water and maybe a few other electric related questions, for example, my friends family had a normal 8 outlet socket with all these Christmas lights plugged in and it was full of water form rain (none if it was waterproof) but nothing happened, since its a socket shouldn't it burn out or something? when I read up about electrical sockets getting wet I have read that it can blow out the whole room/house power if its not a socket that has its own mini circuit breaker, while other say you will get shocked or start a fire, can someone kinda give me the basics about this please? or a link to a site that can explain?

Subject: Re: Electrical Outlets
Posted by jnz on Mon, 13 Dec 2010 07:23:30 GMT
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It depends on how it gets wet, and how much water. A little moisture might cause it to short circuit, but would probably not cause any circuit breaker/fuses to blow. While on the other hand, a immerse it in water and it is very likely.

A socket on it's own should not cause a fire/explode or anything spectacular when it is short circuited as the fuse/breaker should kick in before any of the electrical components supplying the socket would fail. Anything after the socket IE: Christmas lights, could cause a fire if it isn't fused properly.

If you are lucky enough to be grounded (touching neutral or a computer case for example) it is quite likely a wet socket will shock you. If you are not grounded, it will probably just tingle.

Subject: Re: Electrical Outlets
Posted by _SSnipe_ on Mon, 13 Dec 2010 10:04:12 GMT
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jnz wrote on Sun, 12 December 2010 23:23It depends on how it gets wet, and how much water. A little moisture might cause it to short circuit, but would probably not cause any circuit breaker/fuses to blow. While on the other hand, a immerse it in water and it is very likely.

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well when i saw the sockets they were really wet, alot, and what do you mean by grounded?

Subject: Re: Electrical Outlets
Posted by Caveman on Mon, 13 Dec 2010 11:30:13 GMT
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Grounded

Subject: Re: Electrical Outlets
Posted by _SSnipe_ on Mon, 13 Dec 2010 18:45:00 GMT
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Caveman wrote on Mon, 13 December 2010 03:30Grounded
I love wikipedia but I hear sometimes shits made up, anyways thanks but I am still wondering how come nothing happened when it was soaked in water due to rsin

Subject: Re: Electrical Outlets
Posted by halo2pac on Tue, 14 Dec 2010 02:36:19 GMT
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Water + Electricity = trip to hospital or death. Mobius style.

Subject: Re: Electrical Outlets
Posted by Nurple on Tue, 14 Dec 2010 09:07:17 GMT
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can you take a picture so we can see what your talking about?

Subject: Re: Electrical Outlets
Posted by NukeIt15 on Wed, 15 Dec 2010 07:01:34 GMT
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Basic chemistry lesson time:

Water is actually not conductive. It's a rather good insulator, in fact. The reason why it is so bad to get electronics wet is because there are usually all sorts of fun things dissolved in the water which are very good conductors. You fill up a tub with distilled water and drop a toaster in it and all you'd get is a wet toaster. Tap water, on the other hand, is rather more dangerous to mix with electric anything as it tends to pick up minerals from the pipes it flows through, seepage from ground water, and so on. Rainwater's ability to cook your shit depends entirely on how dirty the air is; the

rain will pick it all up on its way down to you.

Translation: if you live in an area with very clean air, a bit of rain water might not necessarily be a trip to short-out city- especially if the electric goodies in question were up off the ground where water is less likely to pool and pick up contaminants from the ground.

If it still works, dry it out and it should be fine. Just don't count on it always being that way.

Subject: Re: Electrical Outlets
Posted by bmr_71 on Fri, 17 Dec 2010 02:47:28 GMT
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(SSnipe) -BLU3Y3Z- wrote on Mon, 13 December 2010 01:08how to science? herp derp. fuckin' circuits, how do they work????

Subject: Re: Electrical Outlets
Posted by Goztow on Sun, 19 Dec 2010 08:27:58 GMT
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bmr_71 could u please stay in the spam fest and heated discussions forums? Thank you.

Subject: Re: Electrical Outlets
Posted by _SSnipe_ on Sun, 19 Dec 2010 20:59:47 GMT
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I wish I could take a pic but it was somewhere far, all I know is it was soaked in water its outside not touching ground but been raining for a week

does anyone got a site to discuss the basics of this?

Subject: Re: Electrical Outlets
Posted by Herr Surth on Sun, 19 Dec 2010 21:07:21 GMT
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(SSnipe) -BLU3Y3Z- wrote on Mon, 13 December 2010 12:45Caveman wrote on Mon, 13 December 2010 03:30Grounded
but I hear sometimes shits made up
lol

Subject: Re: Electrical Outlets
Posted by _SSnipe_ on Sun, 19 Dec 2010 21:11:58 GMT
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Herr Surth wrote on Sun, 19 December 2010 13:07(SSnipe) -BLU3Y3Z- wrote on Mon, 13 December 2010 12:45Caveman wrote on Mon, 13 December 2010 03:30Grounded
but I hear sometimes shits made up
lol
What I mean is wiki can be edited by anyone so I try not to use them as a absolute source

Subject: Re: Electrical Outlets
Posted by IAmFenix on Sun, 19 Dec 2010 22:44:48 GMT
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(SSnipe) -BLU3Y3Z- wrote on Sun, 19 December 2010 15:11Herr Surth wrote on Sun, 19 December 2010 13:07(SSnipe) -BLU3Y3Z- wrote on Mon, 13 December 2010 12:45Caveman wrote on Mon, 13 December 2010 03:30Grounded
but I hear sometimes shits made up
lol
What I mean is wiki can be edited by anyone so I try not to use them as a absolute source
http://science.howstuffworks.com/electricity6.htm <-mildly detailed
http://www.wisegeek.com/what-is-an-electrical-ground.htm <-simple for average person
http://amasci.com/amateur/whygnd.html <-why are you reading this novel and not the short links?

Subject: Re: Electrical Outlets
Posted by _SSnipe_ on Sun, 19 Dec 2010 23:00:15 GMT
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thank you i will read those

Subject: Re: Electrical Outlets
Posted by Caveman on Thu, 13 Jan 2011 15:58:18 GMT
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I know this is a bit off topic but I just need to ask...

You didnt know what grounding meant... Haven't you been playing around with the inside of computers recently?

If so; Did you ground yourself then?

Subject: Re: Electrical Outlets

Posted by _SSnipe_ on Thu, 13 Jan 2011 18:50:39 GMT
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Caveman wrote on Thu, 13 January 2011 07:58I know this is a bit off topic but I just need to ask...

You didnt know what grounding meant... Haven't you been playing around with the inside of computers recently?

If so; Did you ground yourself then?
Well I know its a bad habit of mine , when I learn something I go more into it sometimes skipping the basics, but I had an idea of what it was, I just wanted to be sure about it

Subject: Re: Electrical Outlets
Posted by Caveman on Thu, 13 Jan 2011 19:41:14 GMT
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But did you ground yourself while playing around with the insides of the computer?

Subject: Re: Electrical Outlets
Posted by _SSnipe_ on Thu, 13 Jan 2011 20:05:24 GMT
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Caveman wrote on Thu, 13 January 2011 11:41But did you ground yourself while playing around with the insides of the computer?
Honestly I am not sure if I did correctly in the past, I usually unplug it, touch the metal frame and sit down while I do it (usually floor or chair, most of times with shoes on) But now I purchase something that wraps around my wrist and attached to anything metal "case" to prevent shock or static

Subject: Re: Electrical Outlets
Posted by Caveman on Fri, 14 Jan 2011 08:59:41 GMT
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Well if you unplugged everything including the power to the PSU (kettle lead) then you're not grounding yourself when you touch the metal case cos its not connected to earth.

Don't take this as im having a go I just dont want you to kill your computer then for you to make a thread here asking why your computer isn't working anymore. If you use the strap you still need the PSU connected.

Subject: Re: Electrical Outlets
Posted by danpaul88 on Fri, 14 Jan 2011 09:03:56 GMT

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Erm, you should NEVER EVER leave the PSU plugged into the wall when working on a computer, unless you want to be electrocuted. Besides, the electrical 'ground' in your house wiring may actually be carrying a small level of voltage, since part of it's purpose is to dissipate stray voltage from faulty wiring.

Grounding yourself to the same level as the metal in the computer case is perfectly acceptable as a grounding method since that's the same metal case the components in your PC are grounded to anyway.

Subject: Re: Electrical Outlets
Posted by Caveman on Fri, 14 Jan 2011 09:11:39 GMT
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I was always taught (while in college) to leave it plugged in but switched off at the socket. I've never been electrocuted. If you know different then I retract my statement. If its not plugged in it has nothing to ground to?

Subject: Re: Electrical Outlets
Posted by _SSnipe_ on Fri, 14 Jan 2011 10:38:04 GMT
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Caveman wrote on Fri, 14 January 2011 01:11I was always taught (while in college) to leave it plugged in but switched off at the socket. I've never been electrocuted. If you know different then I retract my statement. If its not plugged in it has nothing to ground to?

well don't listen to me, I was just following what I thought was common sense, I will be taking your advice.

Subject: Re: Electrical Outlets
Posted by Omar007 on Fri, 14 Jan 2011 11:00:22 GMT
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What I do before I do anything is
1. Switch off power at the PSU
2. Unplug power cable
3. Touch the metal casing of the system

I've done this for years and I never had any electric shock on me nor the system I was working on.

Subject: Re: Electrical Outlets

Posted by EvilWhiteDragon on Fri, 14 Jan 2011 11:32:25 GMT
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danpaul88 wrote on Fri, 14 January 2011 10:03Erm, you should NEVER EVER leave the PSU plugged into the wall when working on a computer, unless you want to be electrocuted. Besides, the electrical 'ground' in your house wiring may actually be carrying a small level of voltage, since part of it's purpose is to dissipate stray voltage from faulty wiring.

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Electrocuted by 12v? LOL.

Only when you open up a PSU you'd be in danger, but since computer PSU's have such a nice and safe casing, there is no need to worry.

And even still, 230v will probably not kill you, although it does feel strange.

Also, the ground wire in your house is really 0v if properly grounded. If this is not the case, there is something very, very very, wrong and you might get yourself electrocuted under the shower once. (water and 230v does kill btw..)

Subject: Re: Electrical Outlets
Posted by danpaul88 on Fri, 14 Jan 2011 11:46:47 GMT
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Caveman wrote on Fri, 14 January 2011 09:11I was always taught (while in college) to leave it plugged in but switched off at the socket. I've never been electrocuted. If you know different then I retract my statement. If its not plugged in it has nothing to ground to?

I was taught by Cisco Academy to always unplug machines before working on them... two different schools of thought I suppose. Technically at the point you unplug the case it is at the same ground level as the electrical socket anyway.

I have never left a computer plugged in whilst working on it and in all the years I have been building, repairing and upgrading computers I have never had any problems with ESD.

Subject: Re: Electrical Outlets
Posted by Caveman on Fri, 14 Jan 2011 13:54:57 GMT
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danpaul88 wrote on Fri, 14 January 2011 11:46Caveman wrote on Fri, 14 January 2011 09:11I was always taught (while in college) to leave it plugged in but switched off at the socket. I've never been electrocuted. If you know different then I retract my statement. If its not plugged in it has nothing to ground to?

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Well its what ive always done since college and ive never killed a system or shocked myself. Its what I do for a living and its always worked. So maybe its two different teaching methods.

Subject: Re: Electrical Outlets
Posted by _SSnipe_ on Mon, 17 Jan 2011 07:11:48 GMT
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Caveman wrote on Fri, 14 January 2011 05:54danpaul88 wrote on Fri, 14 January 2011 11:46Caveman wrote on Fri, 14 January 2011 09:11I was always taught (while in college) to leave it plugged in but switched off at the socket. I've never been electrocuted. If you know different then I retract my statement. If its not plugged in it has nothing to ground to?

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