

Re: Totally newbie question

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- *From:* "Tim Williams" <tmoranwms@xxxxxxxxxxx>
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"about 1.000 ohms" sounds really silly. The practice of indicating a precise number by extending the decimal completely negates the "about" calling for generality! Unless you meant ",", in which case "1,000" = 1k ohm, which is a more common value than a 0.1% tolerance "about 1 ohm" resistor.

But anyway, it limits current. $I = V/R$. Increase R (where the galvanometer and cell have some finite resistance already) and I falls.

Tim

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Deep Fryer: A very philosophical monk.

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"SpiralCorp" <antonioetayo@xxxxxxxxxxx> wrote in message
news:1182987367.411561.115150@xx

Greetings duders, I've just recently taken up the study of electronics as a hobby and I have some very newbie questions. Since my only source of input is some random books, I need someone to go to with these queries. What better place than an electronics newsgroup, right?

Ok, so I'm reading about resistances, cells and whatnot. And I stumble upon this line "...a resistor of about 1.000 ohms should always be used in series with the galvanometer in experiments of this kind, connecting the galvanometer directly will cause too much current to flow; possibly damaging the galvanometer and making the acid boil..."

Clearly the experiment is meant to illustrate chemical energy cells. Now here's my question, why would a resistance stop it from boiling? Wouldn't it suck just as much energy from the acid as the galvanometer alone and dissipate it as heat?

I'm kind of lost with the concept here... I guess I need someone to explain it from another perspective. I'm also interested in this because I've been wondering how you would safely draw a specific current and voltage from the utility mains. I know about voltage divider networks... but the same question remains, wouldn't the

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resistances just dissipate that ridiculous amount o energy that I'm not using? I must be missing something...

Thanks in advance for the explanation.