

Re: Battery level tester.

Source: <http://sci.tech-archive.net/Archive/sci.electronics.design/2004-10/0182.html>

From: John Woodgate (jmw_at_jmwa.demon.contrasпам.yuk)

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I read in sci.electronics.design that Colin Dawson <nospam@cjdawson.com> wrote (in <cjh1r1\$dm1\$1@hercules.btinternet.com>) about 'Battery level tester.', on Thu, 30 Sep 2004:

>Kerio Technologies Inc.
>DC-DC Power Adapter
>Energy Knight I
>Model Number: P70W D-D
>

Google shows Kerio Technologies Inc. as a software company. No hardware.

>
>>>
>>
>> *It would be better to get rid of them at source if they are real spikes*
>> *on the 12 V supply; they might affect other stuff even if they don't*
>> *affect anything you connect at present.*
>
>*That's easy, unplug the laptop. Other than this there's not really alot*
>*I can do about it. There is a little scope here to add some kind of*
>*regulation to the sockets. It's a little tight for space though.*

Regulation won't do anything. Your big battery is a very good regulator. That's why it's so puzzling that you get this flickering.

>
>>
[snip]
>>
>> *Your circuit diagram has disappeared from my archive, but a simple RC*
>> *filter at the voltmeter input may be sufficient, if spikes are the*
>> *cause. If you send the diagram to [jmw\(at\)jmwa dotdemon dotco dotuk](mailto:jmw(at)jmwa.dotdemon.dotco.dotuk), I'll*
>> *suggest some values for the R and C.*
>
>*The diagram is one my website at*

><http://www.cjdawson76.btinternet.co.uk/images/astronomy_batterymonitor_fullsize.jpg>
>*If you want to see the whole project, take a look at*

sci.electronics.design: Re: Battery level tester.

><http://www.cjdawson76.btinternet.co.uk/astronomy_powerbox.html>

AHA!!!! ENLIGHTENMENT AT LAST!!!!

This is what is wrong:

QUOTE

"Connect an input voltage of 12.65 volt between the positive and negative poles and adjust the 10K trimmer potentiometer until Led 10 lights up. Lower the voltage and in sequence all other LED's will light up. Check that Led 1 lights up at approximately 11.89 volts.

At 12.65 volt and higher the battery is fully charged, and at 11.89 is considered 'empty'."

ENDQUOTE

That's simply not true at all. 'Empty' is, to be very conservative, 1.7 V/cell or so, giving 10.2 V overall. Your meter is vastly too sensitive; you have only 76 millivolts difference between adjacent LEDs.

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Regards, John Woodgate, OOO - Own Opinions Only.

The good news is that nothing is compulsory.

The bad news is that everything is prohibited.

<http://www.imwa.demon.co.uk> Also see <http://www.isce.org.uk>