

# Re: Problem Using a DC Power Supply

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- *From:* [Rodney.Marriott@xxxxxxxxxxxxxxx](mailto:Rodney.Marriott@xxxxxxxxxxxxxxx)
  - *Date:* Sun, 10 Jun 2007 07:15:46 -0700
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On 10 Jun, 14:51, Baron <baron.nos...@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote:

CWatters inscribed thus:

<frank\_lo...@xxxxxxxxxx> wrote in message  
[news:1181466588.531148.57370@xx](mailto:news:1181466588.531148.57370@xx)

I have the following Power Supply

<http://www.globalspecialties.com/1302b.html>

I can adjust the voltage by rotating the knob but I can't seem to do the same for the current. When I rotate the knob, the current stays at zero Ampere. Is the unit broken or am I doing something wrong here?

Frank

Have you got a load connected? If not no current will flow. Try connecting a 12v light bulb of around 10 to 20W. Set the output voltage to 12V and the current limit to max. The bulb should draw around 800mA(10W) or 1.6A (20W). Then you can wind the current limit down to see what happens. Note that setting a lower current limit

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than the bulb draws will reduce the output voltage. That's how they limit the current.

Note that you should probably treat the current knob as a safety device to limit the power in the even of a fault in the load eg When hooking up a new circuit you have built for the first time. It also protects the output of the power supply if you accidentally short circuit the output.

It's not always possible operate a bench power supply in "current limit mode" continuously as some power supplies can overheat. Read the instructions for your model. Some models are ok with this.

I have one! That is exactly how it works. Current limiting is great for testing small thermister's using self heating.

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Best Regards:

Baron.- Hide quoted text -

- Show quoted text -

It may be of interest to you, that some portable TV's well some of the older ones, that were rated 12-24 volts, that as you increased the supply volts, say from 12 to 24, then the current falls. I know this goes agains ohms law, but they don't work like that! To keep the wattage about the same, the current has to fall. This is achieved using a dc-dc converter. If anyone wants to know how these work, just ask.

Cheers

Rod

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