

## Re: Amusing problem about DC polarity

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- *From:* Don Lancaster <[don@xxxxxxxxxx](mailto:don@xxxxxxxxxx)>
  - *Date:* Sun, 11 Jun 2006 20:21:04 -0700
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Rich Grise wrote:

On Sat, 10 Jun 2006 01:53:54 -0700, siliconmike wrote:

siliconmike wrote:

Imagine a black plastic box that takes in DC power but has no polarity markings on its power socket.

The problem is to experimentally determine the correct DC polarity without opening the box and without letting the box die.

How close can we come?

The black box, say is a portable electronic consumer device – say for example a mobile phone or a CD player or a currency counter for that matter.. Working on less than 24 V for example..

Apologies, I should have mentioned that earlier..

Then, it's definitely time to either X-ray it, open it, or toss it.

Do you know what this "box" is supposed to accomplish?

Good Luck!  
Rich

Briefly apply current limited ac and curvetrace the result.

Re: Amusing problem about DC polarity

(assumes no humongous input capacitors; if present, lower the frequency)

Most any commercial device will often include input protection.  
Such as a diode or two.

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Many thanks,

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