

# Re: Help Getting Started – Simple DC Circuit

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*Source:* <http://sci.tech-archive.net/Archive/sci.electronics.basics/2005-11/msg00325.html>

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- *From:* Peter Bennett <[peterbb@xxxxxxxxxxxxxxxxxxxxx](mailto:peterbb@xxxxxxxxxxxxxxxxxxxxx)>
  - *Date:* Fri, 11 Nov 2005 19:24:24 -0800
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On Sat, 12 Nov 2005 00:51:04 GMT, "Mark Jerde"  
<[MarkJerde@xxxxxxxxxxxxxxxxxxxxx](mailto:MarkJerde@xxxxxxxxxxxxxxxxxxxxx)> wrote:

>I'm just back from Radio Shack with a package of these to get started  
>thinking:  
>  
><http://www.radioshack.com/product/index.jsp?productId=2062588&cp>  
>20 assorted LEDs, 2 – 3V, 10–20 mA  
>  
>(They were the only thing economical. Other LEDs were one or two per  
>package, \$1.98 to \$4.98. I'll get another package when I go to get the  
>battery holder & resistors.)  
>  
>Am I reading the specs right to use  $V_{cc} = 3\text{ V}$ ,  $V_{led} = 2.5\text{ V}$  and  $I_{led} = 15$   
>mA?  
> $R = (3 - 2.5) / 0.015$   
>= 33.33 Ohms  
>  
>When I did electronics many years ago most of the resistors were in the  
>kiloohm and megaohm range. 33 ohms seems wrong. Am I missing something?

Red, yellow and green LEDs are around 2 volts, and I find they are quite bright enough with 10 mA, so, with 3 volts, you could use 100 ohms.

Blue and white LEDs want about 3.6 volts, I believe, so you'd need another cell or two for them.

Resistors under 1K are certainly not uncommon – I think I've got a few values under 10 ohms in my stock at work (although I'll admit that I don't use such low values very often.)

—  
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Re: Help Getting Started – Simple DC Circuit

new newsgroup users info : <http://vancouver-webpages.com/nnq>

GPS and NMEA info: <http://vancouver-webpages.com/peter>

Vancouver Power Squadron: <http://vancouver.powersquadron.ca>

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- **Follow-Ups:**

- ◆ **Re: Help Getting Started – Simple DC Circuit**

- ◇ From: Mark Jerde

- **References:**

- ◆ **Help Getting Started – Simple DC Circuit**

- ◇ From: Mark Jerde

- ◆ **Re: Help Getting Started – Simple DC Circuit**

- ◇ From: Randy Day

- ◆ **Re: Help Getting Started – Simple DC Circuit**

- ◇ From: Mark Jerde

- Prev by Date: **Re: 12V DC voltage stabilizer**

- Next by Date: **Re: Help Getting Started – Simple DC Circuit**

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