Boss CE-2 Led Very Dim

by **mgp701** » 23 Apr 2012, 18:01

Hello,

I purchased a BOSS CE-2 off eBay a while back. The pedal works fine, however, the LED is very dim when the pedal is engaged. It's extremely hard to see if I'm in a bright room. I've tried powering it with a 9 volt battery and I have the same issue. I connected the LED directly to a 9 volt battery and it was very bright so it seems the LED is capable to producing more light. Does anyone have any suggestions on what is going on here and how I can have the LED brighter. I've attached a photo of the guts of the pedal in case that helps diagnose the issue. Any and all is help is greatly appreciated.

Thanks
Mike

mgp701

Re: Boss CE-2 Led Very Dim

by **Laurie** » 23 Apr 2012, 19:41

The old LEDs are very dim. If you can take some hi-res pics of the board near the end with the wires I'll have a look at the resistors - I've seen a few of these with "ACA" resistors that are incorrect

Laurie

Re: Boss CE-2 Led Very Dim

by **mgp701** » 23 Apr 2012, 20:47

Hi Laurie,

Thanks for the response. I've attached two photos for you to look at. Let me know if you need more to help figure this issue out.

Thanks!!

mgp701

Re: Boss CE-2 Led Very Dim

by **mgp701** » 23 Apr 2012, 20:50

Photo Two

mgp701

Re: Boss CE-2 Led Very Dim

by **Laurie** » 23 Apr 2012, 23:23

Sorry - should have specified the angle... The resistor I want to see is the one at the tip of the arrow below.

Laurie

Re: Boss CE-2 Led Very Dim

by **Zerksies** » 24 Apr 2012, 00:09

Or could you just read us the colors that are on that resistor

Zerksies

Re: Boss CE-2 Led Very Dim

by **mgp701** » 24 Apr 2012, 02:53

I checked and that resistor is 390 ohms. Is this the correct value? By the way, where did you get the graphic of the CE-2 layout?

mgp701

Re: Boss CE-2 Led Very Dim

by **Laurie** » 24 Apr 2012, 03:48

Nope... another one wrong (this is the 4th I've seen).

This resistor should be 100 Ohms. Change it and all will be well.

http://www.eserviceinfo.com/index.php?what=search2&searchstring=boss+CE-2.pdf

Laurie

Re: Boss CE-2 Led Very Dim

by **verivorax** » 24 Apr 2012, 04:35

Is this a Roland factory flaw? Or a remnant of a prior version of the circuit?

verivorax

Re: Boss CE-2 Led Very Dim

by **Laurie** » 24 Apr 2012, 04:42

Almost certainly a flaw. There is only one circuit version.

Laurie

Re: Boss CE-2 Led Very Dim

by **mgp701** » 24 Apr 2012, 15:46

Thanks Laurie for your help!! I'll be switching out the resistor tonight. Did the other pedals with this problem also have 390 ohm resistor? I wonder how this happened. I assume that these boards would have been populated by a machine in order to prevent errors like this.

Mike

mgp701

Re: Boss CE-2 Led Very Dim

by **mgp701** » 24 Apr 2012, 15:54

One more thing. I was looking at the schematic and is the resistor in question R26? And, what is the trim-pot on the PCB for?

mgp701

Re: Boss CE-2 Led Very Dim

by **Pepe** » 24 Apr 2012, 16:11

Don't mess with a trimpot, unless there's a reason for it!

Pepe

Re: Boss CE-2 Led Very Dim

by **Zerksies** » 24 Apr 2012, 16:14

the trim pot is for the bias, if you don't have the right equipment you can really screw up the sound of the pedal.So don't mess with it

Zerksies

Re: Boss CE-2 Led Very Dim

by **Laurie** » 24 Apr 2012, 16:27

> *mgp701 wrote:*
> *One more thing. I was looking at the schematic and is the resistor in question R26? And, what is the trim-pot on the PCB for?*

It is R53. Note that it is 100 Ohms, not 100k Ohms (R26 is 100k).

Yeah, they have all had 390 Ohms so far. I'm guessing that someone grabbed the wrong parts bin one day. The CE-2's that work properly all have 100 Ohm resistors.

Laurie

Re: Boss CE-2 Led Very Dim

by **Laurie** » 24 Apr 2012, 16:30

Oh... so a disclaimer. This resistor DOES need to be changed.

But it won't have any effect (excuse the pun) on the LED brightness using battery. Easiest solution for super-dim LEDs is to grab a new one when you are buying the resistor. New technology LEDs are substantially brighter. Note that LEDs have polarity (excuse me if you already know that!) so put it the same way around when you install it.

Change the colour to something funky...

Laurie

Re: Boss CE-2 Led Very Dim

by **mgp701** » 24 Apr 2012, 16:49

Thanks Laurie! I noticed that the CE-2B has a 390 ohm resistor for R53 so maybe that's how it got mistakenly put in there. Someone forgot what version of the chorus they were building

mgp701