Subject: LEDs light - can I assume CCS is wires properly?
Posted by colinhester on Tue, 01 Mar 2005 01:13:09 GMT
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Got everything done except for the signal path. Fired it up and all the tubes glow and the 4 LEDs shine like the stars. Can I assume the CCS is properly wired (not biased yet)? If so I got 4 more wires to go.....Colin

Subject: Almost certainly
Posted by PakProtector on Tue, 01 Mar 2005 01:44:57 GMT
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sounds good to me so far. I would suggest putting a 10R resistor in series with the B+ lead to each CCS to measure the current. You don't want to run the LED's over current.Or you could clip lead in the battery and measuring equipment to determine regulated curent amount.Do measure before runnig extensively. You could get fairly close by adjusting current to give ~130 volts on the plate. With the 2x LED bias, it should be between 10 and 15 mA which is quite LED-safe.regards,Douglas

Subject: Dead on 130V and stupid question
Posted by colinhester on Tue, 01 Mar 2005 02:07:28 GMT
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Got the bias set to 130 VDC with just a couple of turns of R3. Here's a really stupid qestion: To measure current on a DVM, does the meter need to be in series with what you want to measure? I clip the leads to the plate and ground and get 130 V no problem. If I switch the meter to measure current I get zero....Colin

Subject: ummmmm
Posted by PakProtector on Tue, 01 Mar 2005 02:13:43 GMT
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Well, I would say that you need the ammeter is series. I would suggest looking for a blown fuse in your meter. The meter should offer a near-zero impedance on the current setting.however, we are working downstream of the CCS so it may never get a current overload. I must try this on my linestage. All the current ought to pass through the meter (the LED's will go out) instead of the valve.My first suspicion s that yo have blown the meter's some point. Don't fel silly about that. I

buy those .25 A fuses in bulk...regards,Douglas

Subject: Yeap, blown fuse
Posted by colinhester on Tue, 01 Mar 2005 02:32:42 GMT
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Fuse in the DVM was gone. I remeasured from plate to ground and adjusted to 15mA; the voltage was 100VDC both channels. When adjusted to 130VDC as before the current was around 50mA. Staying at 15mA and 100VDC. And yes, the LEDs went out when measuring the current this time. Thanks a bunch.....Colin

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Subject: Re: Yeap, blown fuse
Posted by cheetah on Tue, 01 Mar 2005 03:26:45 GMT
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Why can't you put a 1 ohm resistor between R3 and the plate? Then measuring across this resistor, 15mV=15mA.Impact on circuti should be nil.Joe

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Subject: Re: Yeap, blown fuse
Posted by PakProtector on Tue, 01 Mar 2005 11:16:33 GMT
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actually, I like Colin's method. Never thought of doing it that way. There is no danger, save for heat generation, as the CCS is dropping all of B+. For short period of time, it shouldn't pose a problem. Just be sure you don't try this from the mu output, as damage couldbe done the mosfets, and there is no way to get an real meanurement w/o including R3.I am going to try this on my valve pre-where I can't test w/ a 9V out of circuit.Thanks for showing me this method.regrds,Douglas

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