Subject: Impedence of JBL D140F
Posted by oldnavycdr on Mon, 09 Sep 2019 15:08:00 GMT
View Forum Message <> Reply to Message

I have a late 60's K100 with the single 15" speaker -- a JBL D140F. As I understand, these speakers were 8 ohms but I want to make sure before I try using a different amp head than the K100. I'm picking up a Vox AC15 Custom head which has outputs for either 8 ohm and 16 ohm speaker cabinets. One thing I want to make sure of is to avoid any damage to this vintage (and original) JBL speaker. It sounds wonderful with the K100 head but I want a variable wattage amp.

Subject: Re: Impedence of JBL D140F
Posted by thetragichero on Mon, 09 Sep 2019 21:58:17 GMT
View Forum Message <> Reply to Message

got a multimeter? even a cheap one from harbor freight?
i personally don't trust 1. the seeming lack of specs for 50 year old drivers 2. any particular 50 year old driver to not be held together with the equivalent of chewing gum

i could just be an incurable cynic

Subject: Re: Impedence of JBL D140F
Posted by oldnavycdr on Mon, 09 Sep 2019 22:08:00 GMT
View Forum Message <> Reply to Message

The speaker has held up well, rarely played at full volume and remains smooth with no break up. Cone is intact and no voice coil rattle. I have found specs for it but I'm wondering if Kustom ordered 16 ohm speakers rather than the stock 8 ohm. I do have a multimeter and can test but my question has more to do with the load on the amp. I want to match amp output impedance with the correct speaker impedance thus protecting both amp and speaker.

Subject: Re: Impedence of JBL D140F
Posted by oldnavycdr on Mon, 09 Sep 2019 23:33:38 GMT
View Forum Message <> Reply to Message

Found my answer on the site. K100 are 0 ohm amps. All should work out.

Subject: Re: Impedence of JBL D140F
Posted by stevem on Tue, 10 Sep 2019 10:06:17 GMT
View Forum Message <> Reply to Message

Yes that a 8 ohm JBL bass driver if it was original to the Kustom K100 amp.

Being a bass driver it only goes up to 2500 HZ in frequency responce so it's going to sound pretty dark if played thru by a 6 string guitar!

If your plan is to use the JBL on the Vox amps 16 ohm output tap then you will drop off 1/3rd of the Vox amps output wattage due to the impeadance mismatch ,and if the Vox amp was for example a 2-12" model then you also will loose 19% of the cone area which will further make for a sound pressure reduction!

The impeadance mismatch will also roll off some of the Vox amps bottom end.

JBL drivers where wired for reverse polarity , so keep that in mind and prove that out by testing it with a 9 volt Battery,

---

Subject: Re: Impedence of JBL D140F
Posted by oldnavycdr on Tue, 10 Sep 2019 19:44:48 GMT
View Forum Message <> Reply to Message

Thanks Steven. The Vox amp I'm considering has both 8 ohm and 16 ohm speaker jacks so I should be good.

Subject: Re: Impedence of JBL D140F
Posted by thetragichero on Wed, 11 Sep 2019 13:40:59 GMT
View Forum Message <> Reply to Message

because the vox is a tube amp do not mismatch the impedance between the load (speaker) and source (amp)
it sounds like you're already aware of that but there's a possibility someone may come to this thread 5 years from now via search engine so i would feel remiss if this thread ended without its mention

---

Subject: Re: Impedence of JBL D140F
Posted by stevem on Wed, 11 Sep 2019 16:20:00 GMT
View Forum Message <> Reply to Message

Your posted comment on having a "variable wattage amp "is what made me post the info on what happens when you mismatch a speaker load on a tube amp , as that is the only way to change a tube amps output wattage without digging into its electronic's.
