Subject: Voltage on primary side K200 bass head. 120 or 230V? Posted by Torsson-2 on Thu, 18 Aug 2016 21:22:08 GMT View Forum Message <> Reply to Message

I have a K200 bass head from 1970.

On the back it says "120 V" but I know I have run it a couple of years ago here in Sweden where we have 230V line voltage. But I got a bit scared when I saw the plate. Didn't think of that before.

The transformer is a Northlake with parts no 019-7005-01, but I can't find any information about it on the Internet.

It has 4 wires on the primary side. The line voltage wires goes to black/white and black (passing switch and thermostat), and then there are one white and one black/violet (or black/brown, difficult to say) that are connected to each other.

My theory is therefore that this is a 'multi-voltage' transformer, that could be wired to handle different voltages, in this case 230V. (I have a similar tranny in a Fender DR amp, that also has 4 wires that should be connected to each other differently, to either get 120 or 240V. Trannys that are only for single voltage, like 120V, only have two wires on the primary)

So maybe it is already wired to suit the Swedish 230 line voltage? But how do I check it? If I use a step down transformer (230->120V), and measure the voltage inside according to the schematics, I figure if I notice the voltages (for instance it should be 39.5V from the rectifiers to the power amp) read about 50% of that value, then it is a 230V amp. If it is 39.5V then it is wired for 120V.

Btw, could it be bad to run it with the step down to 120V if the amp is wired for 230V? It couldn't be bad if the voltage is lower, right?

Subject: Re: Voltage on primary side K200 bass head. 120 or 230V? Posted by chicagobill on Thu, 18 Aug 2016 23:02:24 GMT View Forum Message <> Reply to Message

I have no experience with export transformers, but your thinking about testing the amp with a step down transformer makes sense. If the power supply voltages are about half of the normal values with the reduced input voltage, then the amp's internal transformer is set for 220-230 volts input.

For testing, there should be no problem with using the step down transformer, but I would not recommend using it that way if it isn't needed.

Subject: Re: Voltage on primary side K200 bass head. 120 or 230V? Posted by stevem on Fri, 19 Aug 2016 10:25:38 GMT View Forum Message <> Reply to Message

Four primary leads means that yes that power transformer is made for 230 volt !

If you measure the DC across the power supply filters / rails and find no less than a - 37 and + 37

and no more than a + and - 44, volts than all is well, but note that the higher limit is bad for the amp, a lower voltage will not harm it.

Subject: Re: Voltage on primary side K200 bass head. 120 or 230V? Posted by Torsson-2 on Fri, 19 Aug 2016 18:48:38 GMT View Forum Message <> Reply to Message

It works! It sounds! It sounds good! It measures 40.4V!

Subject: Re: Voltage on primary side K200 bass head. 120 or 230V? Posted by Torsson-2 on Fri, 19 Aug 2016 18:53:10 GMT View Forum Message <> Reply to Message

Btw, is it possible to jumper the channels on a K200? Are they in phase?

Subject: Re: Voltage on primary side K200 bass head. 120 or 230V? Posted by stevem on Sat, 20 Aug 2016 10:15:18 GMT View Forum Message <> Reply to Message

Don't jump, Y off.

Subject: Re: Voltage on primary side K200 bass head. 120 or 230V? Posted by Torsson-2 on Sat, 20 Aug 2016 12:55:15 GMT View Forum Message <> Reply to Message

Why not?

Subject: Re: Voltage on primary side K200 bass head. 120 or 230V? Posted by stevem on Sat, 20 Aug 2016 23:08:57 GMT View Forum Message <> Reply to Message

Because one input Jack on each channel has a cap on it to roll off some Bass , so no matter how you jump it a tonal change that you may not want will take place!