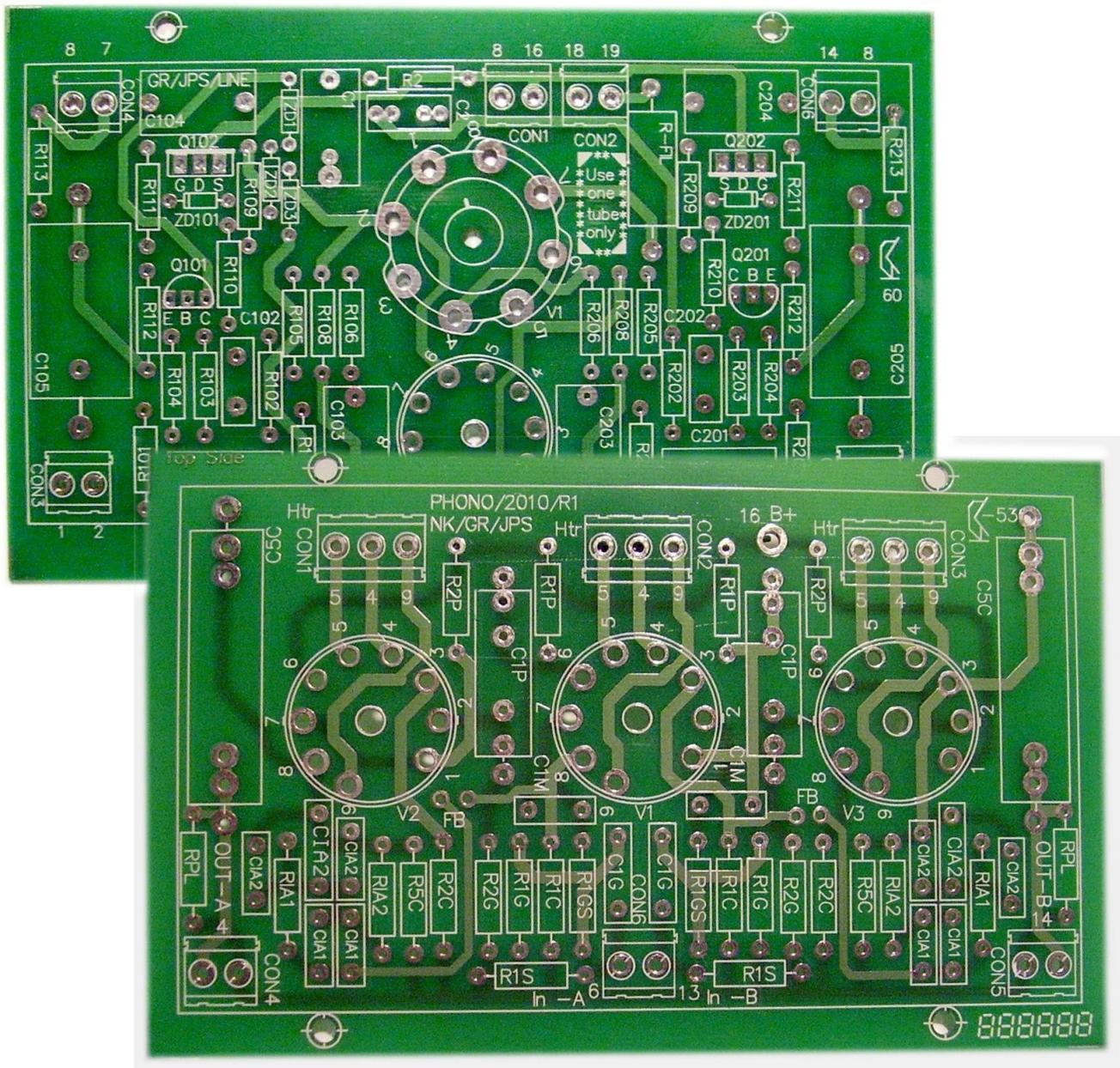


Application Note

AN-3

Combining the PAS-K Phono with the CVD PAS Single Tube Line Stage

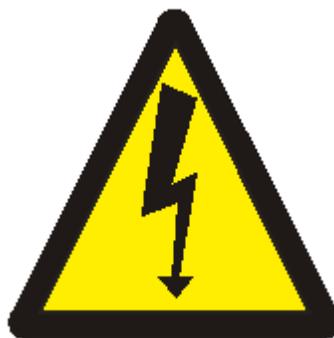


Classic Valve Design



Classic Valve Design assumes no responsibility for circuit or user damage from the use or misuse of these boards or any other product. We simply provide these on an AS-IS basis with workmanship quality as the only thing guaranteed at this time.

This product is designed for and use around **LETHAL VOLTAGES**. We assume the user has a reasonably competent grasp of line operated electronics at the time of sale.



* Dynaco is a registered trademark of Panor Corporation *
* Board design is © Classic Valve Design *

Combining the PAS-K phono stage by Norman Koren and the CVD PAS line stage by Classic Valve Design is even a simpler job than combining the two Koren units - line stage and phono.

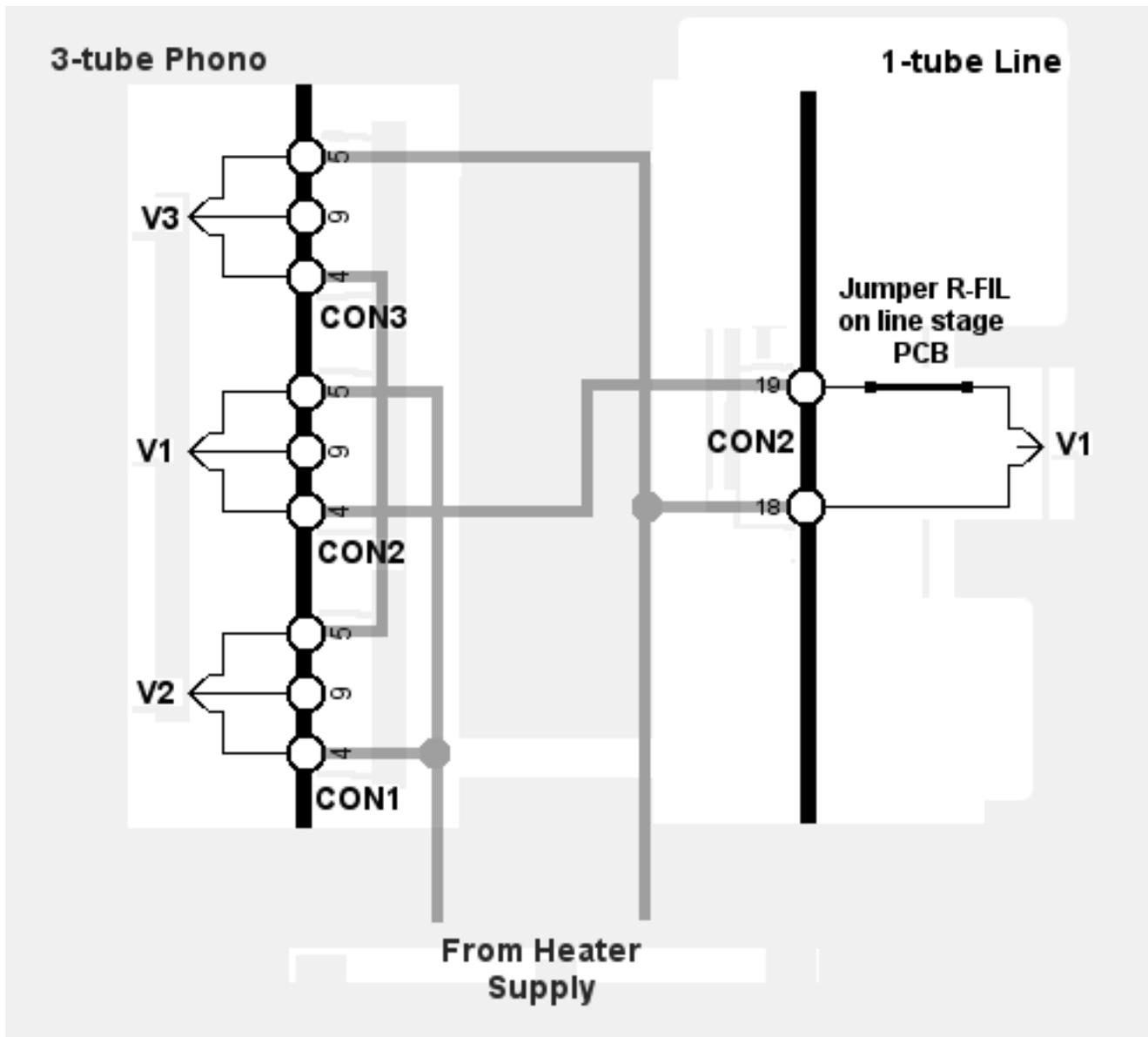
The reason for this is the available tube heater supply current in a stock PAS preamplifier. Dynaco literally made the PAS power transformer to accept the design current and barely a milliamp more.

By using the CVD PAS line stage with the PAS-K phono board, the design heater current of an original stock PAS preamplifier is maintained.

The stock PAS came with four tubes, 12AX7, and each board ran them in series. This meant the required heater current for each board was the same as for one 12AX7, 150mA, but required voltage was doubled to 24V. Two boards meant the total draw (not including the 12X4 rectifier and power hungry pilot lamp) was 300mA @ 24V. The PAS DC heater supply is a doubler, giving the needed 24V @ 300mA.

Fortunately, our PCB designer was clever enough to create our PAS-K boards with the ability to lead each tube heater pin to their own connector, so you the user can wire them in a variety of ways. Since the PAS-K phono uses three tubes and our CVD-PAS only one (either 12AX7 or 12SL7 draw 150mA), the total of four tubes and two-board total heater current draw of 300mA is maintained.

Below is the method of interfacing these boards heaters with no trouble and no mods are required to the original PAS heater power supply.



Documentation written by Gregg van der Sluys, *Classic Valve Design*
www.CLASSICVALVE.ca

